

December 2014

Setting price controls for 2015-20
Final price control determination notice:
company-specific appendix – Southern Water



OFWAT

Contents

| | |
|--|-----|
| Overview | 2 |
| A1 Final determination – at a glance | 6 |
| A2 Wholesale water | 11 |
| A3 Wholesale wastewater | 26 |
| A4 Household retail | 44 |
| A5 Non-household retail | 55 |
| A6 Appointee financeability and affordability | 60 |
| | |
| Annex 1 Wholesale costs | 74 |
| Annex 2 Household retail | 79 |
| Annex 3 Reconciling 2010-15 performance | 86 |
| Annex 4 Outcomes, performance commitments and ODIs | 118 |

Minor corrections to this company specific appendix were published on 13 February 2015.

Overview

This appendix sets out the details of the final determination of price controls that are specific to Southern Water. As set out in [‘Policy chapter A1 – introduction’](#) (‘policy chapter A1’), the final determination protects customers in accordance with our statutory duties (summarised in policy chapter A1) and [‘Setting price controls for 2015-20 – final methodology and expectations for companies’ business plans](#) (our ‘final methodology statement’). We have also had regard to relevant guidance from the UK Government and the principles of best regulatory practice to be transparent, accountable, proportionate, consistent and targeted.

We published [‘Draft price control determination notice: company-specific appendix – Southern Water’](#) (the ‘draft determination’) for Southern Water on 29 August 2014. Southern Water was not an enhanced company. It has been treated in the same way as the other non-enhanced companies.

The customer challenge group (CCG) played an important role in both the development of the company’s original plan and the company’s revised proposals in response to our challenges and published guidance.

Since the first submission of its business plan in December 2013, Southern Water’s proposals have also continued to evolve to take into account the outcome of our risk-based review (RBR), [‘Setting price controls for 2015-20 – risk and reward guidance’](#) (our ‘risk and reward guidance’), our draft determination and other relevant policy consultations.

In its revised business plan in June, the company made a number of changes in response to our feedback from the RBR and sought to provide further evidence to justify its business plan. This included a number of special cost claims that set out reasons why we should increase our wholesale wastewater cost threshold to close the gap with the company’s business plan. It provided sufficient evidence to enable us to accept a number of its wastewater cost claims in our draft determination, including its claim for national environment programme expenditure, but we did not accept others due to the lack of evidence including one to enhance bathing beaches. Gaps remained between the company plan and our cost thresholds of £110m for wastewater and £45m for water. There were a number of other areas of concern where we intervened to protect the interests of consumers. The most significant of these was around reconciling 2010-2015 performance, where we had specific concerns regarding a number of serviceability measures and we therefore applied a shortfall of £153m.

The company’s representation on the draft determination focused on a number of our interventions including:

- reconciling 2010-2015 performance;

- wholesale costs, where it responded to our challenge by reducing wholesale wastewater expenditure by £59 million and providing further evidence; and
- adjustments to costs within the retail controls.

We also received representations from the CCG, the Consumer Council for Water (CCWater), and the Environment Agency. All were broadly supportive of our determination, but made some specific comments. In particular, the CCG and CCWater stated support for the expenditure to enhance bathing beaches and all three stakeholders supported a reward for exceeding the proposed performance commitment (PC) we included in our draft determination to reduce per capita consumption.

In reaching the final determination, we have carefully considered all representations we received on the draft determination (which was based upon the latest business plan submitted to us) and have taken account of the most up-to-date information available where appropriate. As a result, this has led to changes that we consider are in the interests of customers and in line with our other statutory duties. These include:

- reducing the size of the shortfall we made to reflect some aspects of performance in 2010-15 from £153 million to £55 million;
- accepting the reduced special cost claim for bathing beaches;
- accepting a reward for exceeding a PC to reduce per capita consumption, although we have used a lower reward rate in line with the evidence; and
- in line with all non-enhanced companies, reducing the allowed return to 3.6% for the wholesale business to reflect the significant movement in the cost of new debt since the publication of our risk and reward guidance in January 2014.

We provide a summary of the key elements of Southern Water's final determination in chapter A1.

The remainder of this document sets out our final determination in more detail¹ and is structured according to the binding price controls we are setting for the wholesale and retail elements of the appointee (the whole regulated business):

- wholesale water;
- wholesale wastewater;
- household retail; and
- non-household retail.

¹ Figures stated in this document (including wholesale costs and bill information) are in 2012-13 prices; retail data is stated in nominal prices. This is consistent throughout this final determination unless otherwise stated.

As we explained in our final methodology statement, these controls are binding, confirmed through the modifications already made to the price setting elements of companies' licence conditions. This means that the companies cannot recover more revenue than allowed under each specific price control and cannot transfer costs between the controls. The revenue allowance for each price control is determined by the costs specific to that particular price control. This provides the companies with more effective incentives. It also helps to avoid distortion to the non-household market, which will be fully open to competition from 2017, as provided for in the Water Act 2014.

To support these binding controls, throughout this document we also provide details on:

- the responses that we have received to our draft determination and any consequential adjustments that we have made;
- the outcomes for the company to deliver and associated outcome delivery incentive (ODI);
- the efficient costs that we consider the company can achieve;
- the adjustments we are making to the wholesale water and wastewater price controls to reflect the company's performance in 2010-15;
- the allowed return for the wholesale water and wastewater controls, and the retail household and non-household net margins;
- the return on regulatory equity (RoRE) range;
- the financial ratios under the notional capital structure;
- the uncertainty mechanisms that form part of each price control; and
- where appropriate, we set out the assumptions we have made to arrive at the allowed revenue for each price control.

Implementing these price limits

Southern Water must deliver its obligations as required by the Water Industry Act 1991, other relevant legislation and its Instrument of Appointment ('licence'). This price control determination has been made under the terms of Southern Water's licence and the Water Industry Act 1991. We consider that Southern Water must act in an economic and efficient manner in delivering all of its obligations.

Policy chapter A1 sets out the milestones leading up to April 1, 2015 that will ensure effective business plan delivery. These cover menu choices, charges approval, reporting and assurance requirements during 2015-20, and 2014 price review (PR14) reconciliation.

In [IN 14/15: '2014 price review – timetable for setting charges for 2015-16 and making menu choices'](#) we set out the requirement for companies to notify us of their menu choices by 16 January 2015. We will make any adjustment to the company's allowed revenues that result from its menu choice as part of the price review in 2019 (PR19). A company's menu choice will be

influenced by our decisions in this final determination. We confirm in annex 4 of this document a commitment that the ODIs will be recalibrated in the true up calculations, based on a sharing rate that is consistent with the company's menu choice. To facilitate this, we expect the company to publish its ODIs with the cost-sharing rate that is implied by its menu choice on 16 January 2015. This will allow inclusion of the recalibrated ODIs within the framework for reporting and assurance from 1 April 2015, which we will publish on 9 February 2015. We require companies' Boards to provide assurance that the recalibrated ODIs conform with the final determination and are consistent with their menu choice. Any modifications should be confined to correctly adjusting the incentive rates for the difference between the final determination assumption on the cost-sharing rate and the rate associated with their final menu choice.

This price determination sets out the allowed revenues that Southern Water can recover from its customers in the period 2015-20. Southern Water is responsible for converting the allowed revenues into charges. In [IN 14/17: 'Approval of charges 2015-16 – our approach, process and information requirements for large and small companies'](#) and the accompanying policy document, we set out the timeline and process for charging approval. Companies are required to provide us with their charges schemes, associated assurances, and the other information requirements, and to provide any new appointees in their area with their charges schemes by 16 January 2015. By 2 February 2015, each company is required to publish its charges scheme.

A1 Final determination – at a glance

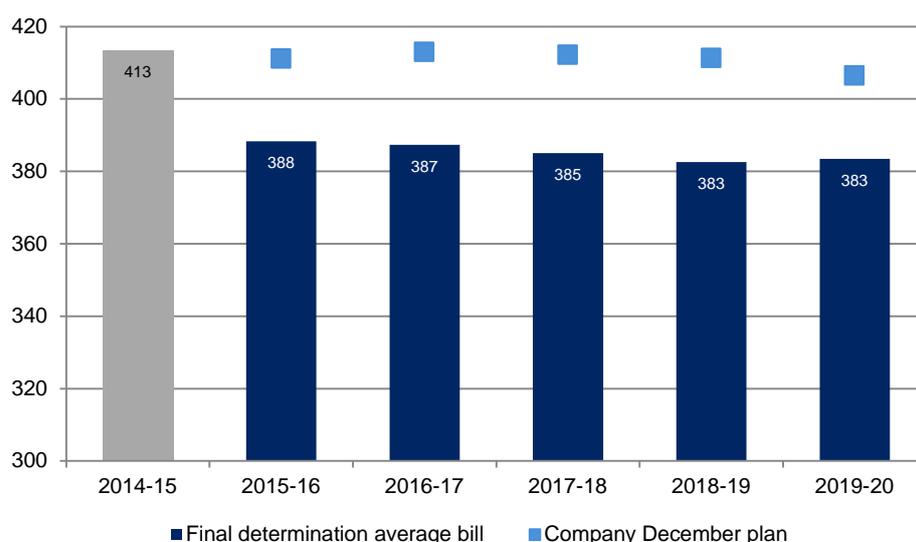
This section provides a summary of the final determination for Southern Water. It summarises what the final determination will mean for customers. It describes the average bills they will pay and the outcomes that the company will deliver in return. For the company it sets out the allowed costs and revenues, RoRE and financeability ratios. We also summarise the interventions we have made to the company's revised plan in order to protect the interests of customers.

Combined average household bill (£)

The chart below shows the average bills proposed in the company's December plan, the average bills in our final determination and the level of current bills (2014-15). All bills are shown without the impact of inflation and are indicative, as final bills will depend on the growth in the number of customers, changes in their usage and the specific charges that the company sets each year within the overall price controls that we have determined.

Our final determination means that average bills in 2019-20 will be £383, which is 7% lower than current average bill levels (£413), before inflation is considered.

The difference between the company's December plan and our final determination is the result of the company's acceptance of our risk and reward guidance, other revisions to its plan and the interventions we have made in its plan. This represents a cumulative saving of £127 for the average customer over the 2015-20 period.



Note: The comparative bills from the company's December plan is based on the data submitted in its business plan but projected using our financial model, thereby ensuring consistency with the final determination projection. So the company's proposed bills illustrated above may not necessarily be the same as those described in the revised business plan.

The outcomes committed to by Southern Water

Southern Water has committed to delivering outcomes that reflect its customers' views. These are supported by 33 associated PCs that identify the company's committed level of performance under each outcome. For 21 of these PCs, the company is subject to associated financial ODIs. For some it can earn a reward for performance better than its commitments during the period from 2015 to 2020, but for all if performance is worse than its commitments it will incur a penalty.

The table below sets out Southern Water's outcomes. These outcomes reflect the priorities of customers set out in research and engagement with the CCG. We have undertaken a comparative assessment of outcomes where it was possible to draw comparisons across the sector and, where necessary, we have intervened to challenge companies to deliver an upper quartile level of performance. Details of the types of incentives and level of PCs associated with these outcomes are set out in annex 4.

| Wholesale water | Wholesale wastewater |
|--|-------------------------------|
| A constant supply of high quality drinking water | A reliable wastewater service |
| Looking after the environment | Looking after the environment |
| Better information and advice | Better information and advice |
| Retail | |
| Responsive customer service | |
| Better information and advice | |
| Affordable bills | |

Allowed costs and revenue for Southern Water

The table below shows the wholesale total expenditure (totex) we have allowed over the period from 2015 to 2020. The final determination allows Southern Water to receive revenues of £3,688 million (over the period from 2015 to 2020). This combines allowed revenues for the wholesale and household retail controls. For non-household retail, we have also set average revenue controls per customer for each of the customer types proposed by the company. The £45 million of non-household revenue shown in the table below is indicative, as it does not assume any gains or losses from competition or the company charging customers at levels different to the relevant default tariffs.

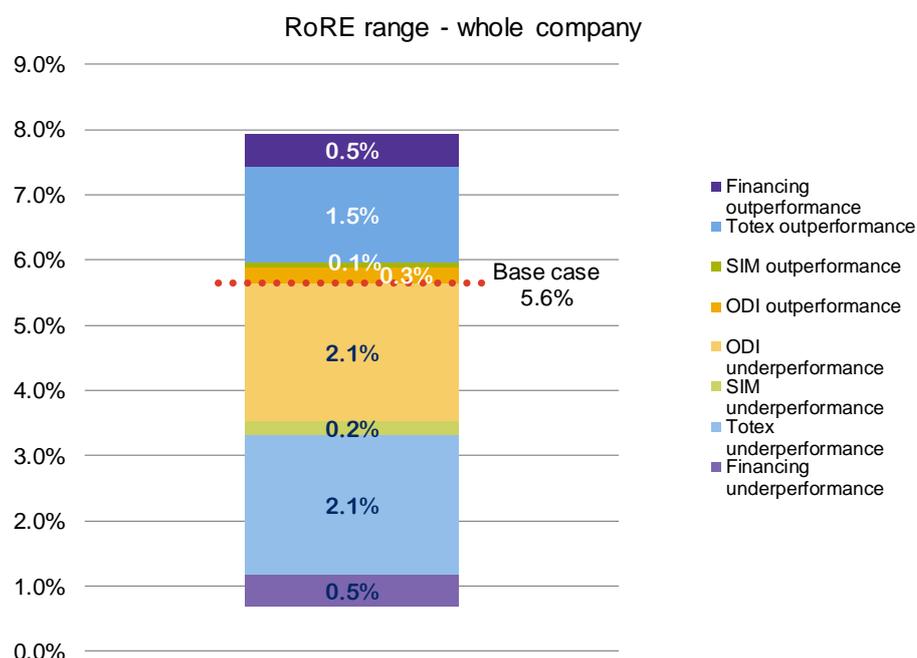
| Wholesale | Water | Wastewater |
|--|-------|------------|
| Totex 2015-20 total (£m) | 767.9 | 1,871.5 |
| Allowed return (%) | 3.60% | 3.60% |
| Allowed wholesale revenue 2015-20 (£m) | 815.3 | 2,569.2 |

| Retail | Household | Non-household |
|-------------------------------------|-----------|---------------|
| Cost allowance – 2015-20 total (£m) | 269.1 | |
| Margin (%) | 1.00% | 2.50% |
| Retail allowed revenue (£m) | 303.7 | 44.5 |

Note: Wholesale figures in 2012-13 prices as wholesale revenue will be affected by inflation and retail figures in nominal prices as retail revenue will not be affected by inflation. This is consistent throughout this final determination unless otherwise stated.

RoRE ranges – appointee

Southern Water has estimated the range of returns on regulatory equity (RoRE) that it could earn dependent on its performance and external risk factors over the price control period. The RoRE range reflects the company’s views and is based on an efficient company with the notional capital structure². We have identified the RoRE impact separately for ODIs, totex performance, financing and the service incentive mechanism (SIM). We note that Southern Water’s actual returns may differ from notional returns due to differences between notional and actual capital structure and notional and actual cost of debt and level of cost efficiency compared to allowed totex and household retail average cost to serve (ACTS).



Source: Our calculations based on information from Southern Water.

Note: Numbers presented based on calibration of the ODIs against an assumed menu choice of a 50% sharing factor.

² The notional capital structure is the capital structure that reflects Ofwat’s assumption of an appropriate level of gearing to use in determining the allowed WACC.

Our calculation of notional financeability ratios

Ofwat has a statutory duty to secure that a company is able to finance the proper carrying out of its functions. We interpret this financing duty as requiring that we ensure that an efficient company with a notional capital structure is able to finance its functions. A company's actual capital structure is a choice for the company and it bears the risk associated with its choices. An efficient company is assumed to be able to deliver its plans based on the expenditure allowance in our final determination.

Southern Water provided assurance that its plan was financeable on the basis of a notional and its actual structure. The notional financial ratios on which this final determination is based, which take account of our interventions, are set out in section A6 and summarised on a 5-year average basis below.

We have assessed this final determination for Southern Water to be financeable on a notional basis.

| Financial ratios for notional company | Ofwat calculation (average 2015-20) |
|--|-------------------------------------|
| Cash interest cover | 3.44 |
| Adjusted cash interest cover ratio (ACICR) – base case (average over five years) | 1.46 |
| Funds from operations/debt | 11.08% |
| Retained cash flow/debt | 8.42% |
| Gearing | 62.02% |
| Dividend cover (profit after tax/dividends paid) | 0.53 |
| Regulated equity/regulated earnings for the regulated company | 17.68 |
| Regulatory capital value (RCV)/earnings before interest, taxes, depreciation and amortisation (EBITDA) | 10.24 |

Summary of interventions

In reaching our final determination we have intervened in the company's business plan, where necessary, to safeguard the interests of customers. In doing so, we have carefully considered all representations we have received on the draft determination and taken account of the most up-to-date information available where appropriate. We summarise the most significant interventions in the table below.

| Outcomes | Wholesale costs |
|---|---|
| <ul style="list-style-type: none"> • Cap: We retained the overall cap and collar on ODIs of +/- 2% of RoRE that we proposed at the draft determination, although we have excluded four PCs from the cap. • Comparative assessment: We have updated our comparative assessment and interventions on PCs, deadbands, collars and caps that are applied consistently for all non-enhanced companies. • Company specific assessment: We have made interventions to ensure that Southern Water is subject to effective incentives that protect customers in areas that are not comparable across companies. This includes making penalties more demanding so that customers are protected if poor performance that they experienced in 2010-15 reoccurs and increasing penalties to take account of the benefits as well as the costs, if the company does not deliver schemes for which we have accepted cost claims. | <ul style="list-style-type: none"> • The company proposed wholesale water totex of £816 million in its plan, which is £47 million above our final determination threshold of £769 million. This is broadly the same as the draft determination. • The company proposed wholesale wastewater totex of £1929 million in its plan, which is £39 million above our final determination threshold of £1890 million. The difference has reduced from the draft determination due to the company reducing its proposed expenditure and providing sufficient evidence for us to accept a further special cost claim on bathing beaches. |
| Retail | Reconciling 2010-15 performance |
| <ul style="list-style-type: none"> • We have used the 2013-14 price base for setting household and non-household retail price controls. • We have not accepted the company's proposed adjustment for bad debt driven by deprivation and bill size (household). • We have not accepted the company's proposed adjustment for input price pressure. | <ul style="list-style-type: none"> • We changed the company's proposed June business plan revenue adjustments by £9 million and its proposed RCV adjustment by £52 million (both in customers' favour). • The company did not include a serviceability shortfall in its June business plan, but wrote to us following its representation stating that it would be prepared to accept in principle a self-imposed shortfall of £22.75 million. We have intervened and included a shortfall of £55 million for serviceability performance. This is included in the change in the RCV adjustment above. |
| Risk and reward | Financeability and affordability |
| <ul style="list-style-type: none"> • Based on the latest market evidence for the cost of new debt we have reduced the company's allowed return from 3.7% to 3.6%. | <ul style="list-style-type: none"> • We have not accepted the company's proposed change to its pay as you go (PAYG) rate. |

A2 Wholesale water

A2.1 Consideration of representations on our draft determinations

In policy chapter A1, we provide a list of the respondents to the draft determinations published in April, May and August of this year. We have fully considered all of the responses received, and where appropriate, we have made either consequential adjustments to our price control methodology or company-specific interventions.

Our general policies relevant to the wholesale water control are set out in the following policy chapters that accompany our final determinations. These include our responses to representations on sector-wide issues.

- [‘Policy chapter A2 – outcomes’](#) (‘policy chapter A2’).
- [‘Policy chapter A3 – wholesale water and wastewater costs and revenues’](#) (‘policy chapter A3’).
- [‘Policy chapter A4 – reconciling performance for 2010-15’](#) (‘policy chapter A4’).
- [‘Policy chapter A7 – risk and reward’](#) (‘policy chapter A7’).
- [‘Policy chapter A8 – financeability and affordability’](#) (‘policy chapter A8’).

Table A2.1 lists the representations we have received that are specific to Southern Water’s wholesale water control and sets out where to find more information on our responses in this document.

Table A2.1 Representations specific to the wholesale water control of Southern Water

| Area | Company-specific representations | Detailed commentary in this company-specific appendix |
|--------------------------------|--|---|
| Outcomes, PCs and incentives | Southern Water CCG CCWater Environment Agency | Annex 4 |
| Outcome delivery and reporting | None | Annex 4 |

| Area | Company-specific representations | Detailed commentary in this company-specific appendix |
|---|----------------------------------|---|
| Calculating allowed wholesale water expenditure | Southern Water | Section A2.3.1 and Annex 1 |
| Calculation of revenues: PAYG and RCV run-off | Southern Water | Section A2.3.2 and A6.5 |
| Cost of capital | Southern Water CCWater | Section A2.3.3 |
| Reconciling 2010-15 performance | Southern Water | Annex 3 |
| Uncertainty mechanisms | Southern Water | Section A2.4 |

A2.2 Company outcomes, performance commitments and delivery incentives

A2.2.1 Outcomes, performance commitments and incentives

In policy chapter A2, we discuss our approach to outcomes for the wholesale and retail controls. Southern Water has developed and committed to delivering outcomes that reflect its customers' views. These are supported by specific PCs and associated incentives (ODIs) whereby the company can be rewarded or penalised for its performance during the period from 2015 to 2020.

The company's outcomes have been developed through customer engagement, with input from its CCG. The CCG's role was to challenge how well the company's outcomes, PCs and delivery incentives reflect the views and priorities of customers, both now and in the future, as well as environmental priorities.

Consistent with the draft determination, our assessment of the specific PCs proposed by each company for wholesale water has focused on:

- comparative assessments where it was possible to compare PCs and incentives across the sector and so challenge companies to deliver an upper quartile level of performance so that companies are focused on delivering benefits for customers and the environment; and

- company-specific assessments to ensure that the PCs proposed by each company are challenging, appropriately incentivised and supported by customer engagement.

For some PCs and incentives types, we have intervened to change the underlying performance level or incentives. Where we have intervened, we have done so to ensure that companies are subject to effective incentives that protect customers against under-delivery and where merited, reward companies for outperformance. We summarise our interventions in table A2.2 and set out whether they are the result of our comparative assessment or company-specific assessment.

Full detail of the wholesale water outcomes, PCs and incentives, and our consideration of relevant responses, is provided in annex 4.

Consistent with our proposal at draft determination, we are intervening to impose an overall cap and collar on ODIs for the 2015-20 period, thereby limiting total rewards and penalties. The cap and collar will apply in line with the approach set out in the policy chapter A2.

Table A2.2 Wholesale water outcomes, performance commitments and incentives

| Company proposal | | | Intervention |
|--|--|--------------------------|---|
| Outcome | Performance commitment | Incentive type | |
| A constant supply of high quality drinking water | Water asset health | Financial – penalty only | Comparative assessment – This PC has a number of sub measures. We have assessed interruptions to supply, mean zonal compliance, discolouration contacts and low pressure as part of our comparative assessment and for clarity present them as separate PCs. |
| | Interruptions to supply | Financial – penalty only | Comparative assessment – We have maintained the draft determination intervention to change the penalty deadband and collar to ensure that the company is incentivised to deliver upper quartile performance. Our revised assessment of upper quartile levels and deadbands has led to minor changes as set out in annex 4. |
| | Drinking water quality – mean zonal compliance | Financial – penalty only | Comparative assessment – We have maintained the draft determination intervention to increase the performance levels, the penalty deadband and collar to ensure that the company is incentivised to deliver upper quartile performance. Our revised assessment of upper quartile levels and deadbands has led to minor changes as set out in annex 4. |

| Company proposal | | | Intervention |
|-------------------------------|--|--------------------------------|---|
| Outcome | Performance commitment | Incentive type | |
| | Drinking water quality – discolouration contacts | Financial – penalty only | Comparative assessment – We have maintained the draft determination intervention to increase the performance levels, the penalty deadband and collar to ensure that the company is incentivised to deliver upper quartile performance. Our revised assessment of upper quartile levels and deadbands has led to minor changes as set out in annex 4. |
| | Water pressure | Financial – penalty only | No intervention |
| | Water use restrictions | Financial – penalty only | No intervention |
| | Leakage | Financial – reward and penalty | Comparative assessment – We have maintained the draft determination intervention to align the penalty range with the industry average. Our revised assessment of upper quartile levels and deadbands has led to minor changes as set out in annex 4. |
| Looking after the environment | Distribution input | Reputational | No intervention. |
| Better information and advice | Per capita consumption | Financial – reward and penalty | Company specific assessment – We have allowed a reward as a result of new willingness to pay evidence in representations from the company, and have maintained the penalty rate as it was in the draft determination. |

A2.2.2 Outcome delivery and reporting

Southern Water’s proposed approach to the measurement, reporting and governance of outcomes and our assessment of this approach is summarised in annex 4.

A2.3 Calculating the wholesale water price control

A2.3.1 Calculating allowed wholesale water expenditure

The cost of delivering wholesale water and wastewater services is a major driver of customer bills, comprising more than 90% of the value chain. In order to protect the interests of customers, we have determined the efficient level of costs for the company to deliver the outcomes that matter to customers both today and tomorrow and to allow it to meet its statutory obligations.

Our approach to determining efficient wholesale expenditure is set out in policy chapter A3.

Table A2.3 Representations specific to the wholesale water totex for Southern Water

| Respondent | Summary of comment | Ofwat response |
|----------------|--|--|
| Southern Water | <p>Southern Water states that the models Ofwat is using are “fundamentally flawed” for a number of reasons including that they are not consistent with economic theory and are not statistically robust. It also states the model development process has lacked consultation and input from industry experts. It provides a report supporting this from Oxera (which includes support from an academic).</p> <p>It recognises that we cannot now, in the time available before the final determination, completely re-specify our modelling approach. It requests that one of the models, “WM3”, is not used to calculate its cost threshold. It also requests that we adjust</p> | <p>We do not agree that the models are flawed. The process for developing the models was designed to maximise the ownership of company business plans. The models were developed with expert third party academic assistance. We have published the full specification of the models and considered detailed representations from the industry on the models before our draft determination. We have retained all the models but have made an adjustment for metering for Southern Water.</p> <p>As we set out in the ‘Policy and Information update’ for Ofwat to use revised variables companies</p> |

| Respondent | Summary of comment | Ofwat response |
|------------|--|---|
| | <p>population and mains replacement variables in the other two models</p> <p>Southern Water has requested that if we retain the “WM3” model that we take account of further changes on the planned interruptions variable and make a specific adjustment for metering.</p> | <p>needed to demonstrate that the existing approach creates systematic bias, not simply that a small number of variables might not best reflect the circumstances of an individual company.</p> <p>Southern Water has not provided sufficient and convincing evidence that the existing approach creates systemic bias. For example, we consider that there may be offsetting effects in the model. We consider that no adjustment is required to the variables used in the models.</p> |

Following representations, the company’s proposed wholesale water totex is £816 million over 2015-20 (versus £840 million in its December plan). This is 6% above the final determination threshold (post additions) of £769 million.

The wholesale water allowed expenditure for Southern Water is detailed in Table A2.4 below. We provide a further breakdown of some of the calculations in annex 1. Further information about our assessment of each claim is set out in the [populated version of the final determination cost threshold models](#).

Table A2.4 Wholesale water allowed expenditure (£ million)

| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total 2015-20 |
|---|---------|---------|---------|---------|---------|---------------|
| Final determination cost threshold | | | | | | 769.0 |
| Costs excluded from menu | 5.2 | 5.1 | 5.1 | 5.1 | 5.0 | 25.5 |
| Menu cost baseline ¹ | 150.6 | 163.1 | 161.2 | 146.4 | 122.2 | 743.5 |
| Company’s view of menu costs ² | | | | | | 790.0 |
| Implied menu choice | | | | | | 106.3 |

| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total 2015-20 |
|--|---------|---------|---------|---------|---------|------------------|
| Allowed expenditure from menu | 152.9 | 165.6 | 163.8 | 148.7 | 124.1 | 755.1 |
| Costs excluded from menu | 5.2 | 5.1 | 5.1 | 5.1 | 5.0 | 25.5 |
| Total allowed expenditure ³ | 158.1 | 170.7 | 168.9 | 153.7 | 129.2 | 780.6 |
| Less pension deficit repair allowance | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 12.7 |
| Totex for input to PAYG | 155.6 | 168.2 | 166.3 | 151.2 | 126.6 | 767.9 |

Notes:

1. Menu baseline is equal to the final determination threshold less pension deficit recovery costs, third party costs and market opening costs related to 2014-15 (see annex 1).
2. Based on company plan totex (reflecting its representation on its draft determination) minus costs for items excluded from the menu. The company will make a final menu choice by 16 January 2016 and any difference between this and the implied menu choice will be reconciled as part of PR19.
3. Includes pension deficit recovery costs.

A2.3.2 Calculation of revenues: PAYG and RCV run-off

In section A6.5, we discuss financeability at an appointee (whole regulated company) level.

Table A2.5 shows the PAYG rates and the amount of totex recovered for wholesale water, which we have used as the basis for this final determination. The 'Resulting PAYG (£m)' is the amount of money recovered from customers in the short term. Table A2.6 shows the RCV run-off amounts included within the wholesale water charge. This is the amount of money recovered in the long term through the company's RCV.

Table A2.5 Southern Water's wholesale water PAYG rates

| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---------------------|---------|---------|---------|---------|---------|-------|
| Totex (£m) | 155.6 | 168.2 | 166.3 | 151.2 | 126.6 | 767.9 |
| PAYG (%) | 53.2% | 46.3% | 47.4% | 53.5% | 55.5% | 51.2% |
| Resulting PAYG (£m) | 82.8 | 77.9 | 78.8 | 80.9 | 70.3 | 390.6 |

Table A2.6 Southern Water’s wholesale water RCV run-off (£ million)

| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|--------------------------------|---------|---------|---------|---------|---------|-------|
| Run-off of 2015 RCV | 30.0 | 28.7 | 27.5 | 25.7 | 25.9 | 137.9 |
| RCV run-off of totex additions | 1.5 | 4.9 | 8.6 | 11.9 | 14.5 | 41.5 |
| Total RCV run-off | 31.5 | 33.7 | 36.2 | 37.7 | 40.4 | 179.4 |

A2.3.3 Return on the RCV

As stated in policy chapter A3, the return on the RCV is a key component of allowed wholesale revenues. The return on the RCV is the wholesale weighted average cost of capital (WACC) applied to the RCV during the 2015-20 period.

In our risk and reward guidance, we set out a single industry cost of capital for both wholesale water and wastewater services of 3.7%. The company accepted this guidance in its revised business plan. As set out in policy chapter A7, based on the latest market evidence on the cost of new debt we have set the wholesale cost of capital at 3.6% This results in a return on capital of £149.1 million over 2015-20.

Table A2.7 for each year, takes into account the proportion of totex additions to the RCV determined by the PAYG rate and RCV run-off as set out in Table A2.5 and Table A2.6 above.

Table A2.7 Southern Water’s wholesale water opening RCV (£ million)

| | 2015-16 |
|--|---------|
| Closing RCV 31 March 2015 | 653.8 |
| Land sales ¹ | 0.5 |
| Adjustment for actual expenditure 2009-10 ² | -17.2 |
| Adjustment for actual expenditure 2010-15 ³ | 130.7 |
| Net adjustment from logging up and logging down ^{3,4} | -53.4 |
| Adjustment for shortfalls ^{3,4} | 0.0 |
| Adjustment for serviceability shortfalls ⁵ | 0.0 |
| Other adjustments ⁶ | 0.0 |

| | 2015-16 |
|--------------------------|---------|
| Opening RCV 1 April 2015 | 714.3 |

Notes:

1. Land sales adjustment is set out in table AA3.22.
2. 2009-10 actual expenditure adjustment is set out in table AA3.22.
3. A component of the capital expenditure incentive scheme (CIS) adjustment as set out in table AA3.18.
4. The net adjustment from the change protocol is set out in table AA3.9.
5. The serviceability shortfall adjustment is set out in table AA3.13.
6. Other RCV adjustments are set out in table AA3.22.

Table A2.8 Southern Water's wholesale water return on RCV (£ million)

| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
|----------------------------|---------|---------|---------|---------|---------|
| Opening RCV | 714.3 | 755.6 | 812.2 | 863.6 | 896.2 |
| RCV additions (from totex) | 72.8 | 90.3 | 87.5 | 70.3 | 56.3 |
| Less RCV run-off | 31.5 | 33.7 | 36.2 | 37.7 | 40.4 |
| Closing RCV | 755.6 | 812.2 | 863.6 | 896.2 | 912.1 |
| Average RCV (year average) | 734.9 | 783.9 | 837.9 | 879.9 | 904.2 |
| Return on capital | 26.5 | 28.2 | 30.2 | 31.7 | 32.6 |

A2.3.4 Reconciling 2010-15 performance

When we last set price controls in 2009 (PR09), we included a number of incentive mechanisms designed to encourage companies to improve and deliver services more efficiently and to manage uncertainty. Consistent with the broad approach set out at the time of final determinations in 2009 we have made adjustments at this price review (PR14) to 2015 to 2020 revenues to take account of company performance in the 2010 to 2015 period.

Our approach to reconciling 2010-15 performance is set out in policy chapter A4.

The company proposed adjustments to the opening RCV and allowed revenue for the wholesale water services to reconcile performance in 2010-15. We have intervened and, as a result, the revenue adjustments for wholesale water have changed from £72.7 million to £71.5 million. We summarise these interventions in Table A2.9 below. The impact on the opening RCV of 2010-15 adjustments is shown in Table 2.7 and we discuss our interventions in this area further in annex 3.

The main changes we have made in the final determination in reconciling the company's 2010-15 performance result from our removal of the serviceability shortfall for unplanned interruptions to supply, accepting the company's additional evidence on back-billing and our revised adjustment to the RCV for actual expenditure in 2009-10.

When making these final determinations we do not have the full information on companies' performance in 2014-15. We set out in ['Setting price controls for 2015-20 – further information on reconciling 2010-15 performance'](#) that we would reconcile for the revenue correction mechanism (RCM), change protocol and serviceability in 2015, and in 2016 for the capital expenditure incentive scheme, when we have the company's actual performance for 2014-15. In carrying out this reconciliation, we will take a proportionate approach (for example, applying materiality thresholds where appropriate) to making adjustments for company's actual performance and implement these changes at the next wholesale price control review in 2019.

Table A2.9 Southern Water’s wholesale water revenue adjustments to reflect 2010-15 performance (£ million)

| Area of intervention | Intervention | Total revenue adjustment 2010-15 (post intervention) | | |
|--------------------------------|--|--|---------------------|---------------------|
| | | Company view | Draft determination | Final determination |
| SIM | We agree with the company’s underlying calculation of the SIM penalty of -0.7%, but we do not accept the companies’ proposal to include a reduction for improved performance in the third year, because it is not in line with the methodology that we are applying to all companies. | -4.5 | -6.3 | -6.3 |
| RCM | We have intervened to use our view of final determination 2009 (FD09) assumptions in the calculations which reduced the revenue adjustment by £0.4 million compared to the company’s representation view of £80.2 million. For the final determination, the company has provided sufficient evidence to support the company proposed adjustment for back-billing that we previously removed at the draft determination. | 74.1 | 76.7 | 79.8 |
| Opex incentive allowance (OIA) | There are no interventions in this area. | 17.4 | 17.4 | 17.4 |
| CIS | As explained in policy chapter A4, we have changed the methodology in the CIS model for all companies with respect to the discount rate used when calculating the future value of the revenue adjustment in the 2010-15 period. In carrying out our assessment, we have included our view of the | -14.3 | -14.3 | -13.9 |

| Area of intervention | Intervention | Total revenue adjustment 2010-15 (post intervention) | | |
|----------------------|---|--|---------------------|---------------------|
| | | Company view | Draft determination | Final determination |
| | applicable change protocol amounts for water and wastewater. Combined these interventions changed revenue by £0.4 million compared with the company's revised business plan. | | | |
| Other adjustments | Southern Water proposed to return money to customers through the RCM as a result of not delivering its leakage target in 2010-11. We have included this separately to the RCM. | 0.0 | -5.6 | -5.6 |

A2.3.5 Calculation of allowed revenue

We set out the calculation of the allowed revenue for Southern Water's wholesale water control in Table A2.10.

Overall, the company's wholesale water revenue allowance will be £161.4 million in 2015-16, increasing by 2.0% to £164.6 million in 2019-20.

Table A2.10 Southern Water's wholesale water allowed revenue (£ million)

| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---------|---------|---------|---------|---------|-------|
| Totex | 155.6 | 168.2 | 166.3 | 151.2 | 126.6 | 767.9 |
| PAYG rate (%) | 53.2% | 46.3% | 47.4% | 53.5% | 55.5% | |
| Totex additions to the RCV | 72.8 | 90.3 | 87.5 | 70.3 | 56.3 | 377.3 |
| RCV (year average) | 734.9 | 783.9 | 837.9 | 879.9 | 904.2 | |
| Wholesale allowed revenue build up: | | | | | | |
| PAYG ¹ | 85.3 | 80.4 | 81.4 | 83.4 | 72.8 | 403.3 |
| Return on capital | 26.5 | 28.2 | 30.2 | 31.7 | 32.6 | 149.1 |
| RCV run-off | 31.5 | 33.7 | 36.2 | 37.7 | 40.4 | 179.4 |
| Tax ² | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Income from other sources ^{3,4} | -4.8 | -4.8 | -4.7 | -4.7 | -4.6 | -23.5 |
| Reconciling 2010-15 performance | 18.7 | 18.7 | 12.3 | 11.1 | 10.8 | 71.5 |
| Ex ante additional menu income | -1.2 | -1.3 | -1.3 | -1.2 | -1.0 | -6.0 |
| Wholesale allowed revenue adjustments: | | | | | | |
| Profiling adjustments ⁵ | -2.9 | -1.0 | 0.9 | -2.2 | 5.7 | 0.5 |
| Capital contributions from connection charges and revenue from infrastructure | 8.4 | 8.0 | 8.6 | 8.1 | 7.9 | 41.0 |

| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|------------------------|---------|---------|---------|---------|---------|-------|
| charges | | | | | | |
| Final allowed revenues | 161.4 | 162.0 | 163.4 | 163.9 | 164.6 | 815.3 |

Notes:

1. PAYG includes the PAYG calculated from totex and the pension deficit repair allowance.
2. Including tax on adjustments for reconciling 2010-15 performance and ex-ante additional menu income.
3. We have adjusted other income values to remove the deferred income element relating to IFRIC18, as this is an accounting adjustment.
4. Our assessment of income from other sources is discussed in policy chapter A3.
5. Our bill profiling adjustments are discussed in section A6.6.

A2.4 Uncertainty mechanisms

We have set the company's allowed revenues for the 2015-20 period. All companies face uncertainty about future costs and revenues, and this is reflected in the rate of return and the established framework in the licence.

We outline our incremental approach to uncertainty mechanisms in the risk and reward policy chapter , where we set out our response to the representations made by stakeholders in support of sector wide uncertainty mechanisms.

We have allowed all companies an uncertainty mechanism for business rates, as the revaluation of business rates in 2017 is a material risk that is largely outside the control of companies. This mechanism allows a proportion of the costs to be passed through to customers, reflecting the fact that companies have more control than customers in managing the risk.

In table A2.11 below, we set out our final assessment of these proposals.

Table A2.11 Wholesale water uncertainty mechanisms

| Assessment at draft determination | Our final assessment |
|--|---|
| In the draft determination we introduced an uncertainty mechanism for water business rates with the proposed sharing rate of 75:25 (customer:company), despite the fact that Southern Water did not propose one. | For our final determination, we confirm the uncertainty mechanism included in our draft determination. The specific text of this Notified Item is in the annex to the final determination letter. The rationale for its inclusion in the final determination is set out in policy chapter A7. |

A3 Wholesale wastewater

A3.1 Consideration of representations on our draft determinations

In policy chapter A1, we provide a list of the respondents to the draft determinations published in April, May and August of this year. We have fully considered all of the responses received, and where appropriate, we have made either consequential adjustments to our industry-wide approach or company-specific interventions.

Our general policies relevant to the wholesale wastewater control are set out in the following policy chapters that accompany our final determinations. These include our responses to representations on sector-wide issues.

- Policy chapter A2.
- Policy chapter A3.
- Policy chapter A4.
- Policy chapter A7.
- Policy chapter A8.

Table A3.1 lists the representations we have received that are specific to Southern Water's wholesale wastewater control and sets out where to find more information on our responses in this document.

Table A3.1 Representations specific to the wholesale wastewater control of Southern Water

| Area | Company-specific representations | Detailed commentary in this company-specific appendix |
|--|--|---|
| Outcomes, PCs and incentives | Southern Water CCG CCWater Environment Agency | Annex 4 |
| Outcome delivery and reporting | None | Annex 4 |
| Calculating allowed wholesale wastewater expenditure | Southern Water CCG CCWater | Section A3.3.1 and Annex 1 |

| Area | Company-specific representations | Detailed commentary in this company-specific appendix |
|---|--------------------------------------|---|
| Calculation of revenues: PAYG and RCV run-off | Southern Water | Section A3.3.2 and A6.5 |
| Cost of capital | CCWater | Section A3.3.3 |
| Reconciling 2010-15 performance | Southern Water Environment Agency | Annex 3 |
| Uncertainty mechanisms | Southern Water Environment Agency | Section A3.4 |

A3.2 Outcomes, performance commitments and incentives

In the policy chapter A2, we discuss our approach to outcomes for the wholesale and retail controls.

The company's outcomes have been developed with input from its CCG. The CCG's role was to challenge how well the company's outcomes, PCs and delivery incentives reflect the views and priorities of customers, both now and in the future, as well as environmental priorities.

Similar to the wholesale water control, our assessment of the specific PCs proposed by each company for wholesale wastewater has focused on a comparative assessment of outcomes and a bottom-up assessment.

We summarise the outcomes, PCs and ODIs for the wholesale wastewater control for Southern Water in table A3.2 below.

For some PCs and incentives types, we have intervened to change the underlying performance level or incentives. Where we have intervened, we have done so to ensure that companies are subject to effective incentives that protect customers against under-delivery and where merited, reward companies for outperformance. We summarise our interventions in table A3.2 and set out whether they are the result of our comparative assessment or company-specific assessment.

Full detail of the wholesale wastewater outcomes, PCs and incentives, and our consideration of relevant representations, is provided in annex 4.

Consistent with our proposal at the draft determination, we are intervening to impose an overall cap and collar on ODIs for the 2015-20 period, thereby limiting total rewards and penalties. The cap and collar will operate in line with the approach set out in the policy chapter A2. The PCs that are excluded from the cap and collar are: Thanet sewers; Millbrook sludge; Woolston wastewater treatment works; and the penalties associated with “Bathing waters with excellent water quality”.

Table A3.2 Wholesale wastewater outcomes, performance commitments and incentives

| Company proposal | | | Intervention |
|-------------------------------|----------------------------------|--------------------------|---|
| Outcome | Performance commitment | Incentive type | |
| A reliable wastewater service | Wastewater asset health | Financial – penalty only | <p>Comparative assessment – This PC has a number of sub measures. We have assessed pollution incidents and sewer blockages as part of our comparative assessment and for clarity present them as separate PCs.</p> <p>Company specific assessment – We have maintained our draft determination intervention to add ‘Wastewater treatment works population equivalent compliance’. This measure has been an area of poor performance for the company during 2010-15 but the company was proposing not to include it as part of its PCs. For the final determination, in line with our methodology we have increased the penalty level so that the maximum penalty is equal to updated information on the relevant costs, calibrated with the totex sharing rate.</p> |
| | Pollution incidents (category 3) | Financial – penalty only | <p>Comparative assessment – We have maintained the draft determination intervention to increase the performance levels, the penalty deadband and collar to ensure that the company is incentivised to deliver upper quartile performance. Our revised assessment of upper quartile levels and deadbands has led to minor changes as set out in annex 4.</p> |
| | Sewer blockages | Financial – penalty only | <p>Comparative assessment – We have maintained the draft determination intervention to make the penalty deadband more demanding to ensure that the company is incentivised to deliver upper quartile performance. Our revised assessment of upper quartile levels and deadbands has led to minor changes as set out in annex 4.</p> |

| Company proposal | | | Intervention |
|-------------------------------|--|--------------------------------|--|
| Outcome | Performance commitment | Incentive type | |
| | Internal flooding incidents | Financial – reward and penalty | No intervention. We have allowed the company to exclude incidents caused by severe weather. |
| | External flooding incidents | Reputational | No intervention. |
| | Odour complaints | Reputational | Company specific assessment – We have maintained our draft determination intervention to introduce a penalty-only ODI based on incremental totex. |
| Looking after the environment | Wastewater treatment works compliance – rivers and streams free from pollution | Financial – penalty only | Company specific assessment – For the final determination we have increased the penalty level so that the maximum penalty is equal to the relevant costs calibrated with the totex sharing rate. This is similar to the level of the shortfall for 2010 to 2015 performance. We have also set the committed performance level equal to 100% |
| | Serious pollution incidents | Financial – reward and penalty | Company specific assessment – This is now a reputational incentive. At the draft determination, we removed the reward. Following company representations, we have removed the penalty as the representations provided evidence that the company is already subject to fines if it commits environmental offences that provide appropriate incentives. |

| Company proposal | | | Intervention |
|-------------------------------|---|--------------------------------|---|
| Outcome | Performance commitment | Incentive type | |
| | Bathing waters with excellent water quality | Financial – reward and penalty | Company specific assessment –We have allowed a revised ODI which is formed of three parts following the approval of the company’s cost claim. However, we have increased the penalty rate for part 2 (increase the number of ‘excellent’ bathing waters) |
| | Proportion of energy from renewable sources | Reputational | Company specific assessment –We have removed the financial penalty imposed at draft determination. |
| Better information and advice | Avoiding blocked drains | Reputational | No intervention. |
| | Thanet sewers | Financial – penalty only | Company specific assessment – We have intervened to protect customers by increasing the penalty rate to reflect costs and an estimate of benefits foregone and also introduced a further incentive with an annual penalty in the event of delays. |
| | Woolston sewage treatment works | Financial – penalty only | Company specific assessment –We have intervened to protect customers by increasing the penalty rate to reflect costs and an estimate of benefits foregone and also introduced a further incentive with an annual penalty in the event of delays. |
| | Millbrook sludge | Financial – penalty only | Company specific assessment –We have intervened to protect customers by increasing the penalty rate to reflect costs and an estimate of benefits foregone and also introduced a further incentive with an annual penalty in the event of delays. |

A3.3 Calculating the wholesale wastewater price control

A3.3.1 Calculating allowed wholesale wastewater expenditure

Our approach to calculating allowed wholesale expenditure is set out in policy chapter A3.

Table A3.3 Representations specific to the wholesale wastewater totex for Southern Water

| Respondent | Summary of comment | Ofwat response |
|----------------|---|--|
| Southern Water | Southern Water has reduced its plan by £59 million. It has reduced its special cost factor claim for Bathing Waters from £52 million to £33 million and removed Eastney flood protection (£19 million). It provided evidence that it considers shows that its costs for all remaining claims are upper quartile efficiency. | <p>We made an allowance for the bathing waters claim in full after implicit allowance. As we set out below for all other claims, for which the company provided representations, we consider that the evidence points to average rather than upper quartile efficiency and so continue to apply efficiency challenges.</p> <p>Our assessment of the gates for Bathing Waters is:</p> <p>Need: Pass</p> <p>Cost benefit analysis: Pass</p> <p>Robust Costs: Pass</p> |
| CCWater | CCWater is concerned with the draft determination intervention to not accept the special cost claim for Eastney flood protection. It considers that this is an area where there have been significant flooding problems in the past. It considers there remains high risk and uncertainty regarding the resilience of this works to future flooding events which could have serious implications for customers resident in that area. | The company has chosen to remove this special cost factor claim, which we agree with, but it must continue to deliver its statutory obligations. We consider that there are other more cost effective approaches to increase flood protection that the company could implement within the final determination cost threshold. We also note that current investment that will complete by April 2015 will provide a level of protection from storms that are likely to occur once in 76 years. This is in excess of that experienced by most customers, as where companies invest |

| Respondent | Summary of comment | Ofwat response |
|----------------|---|--|
| | | they usually do so to protect against storms that are likely to occur once in 30 years. |
| CCG | Fully supports the companies revised proposals on Bathing Waters and believes the combination of the promised stakeholder engagement and CAP oversight should give Ofwat assurance that the bathing waters programme will deliver what is promised to customers | As set out above, we have accepted the special cost factor claim. The delivery of this scheme will have CAP oversight as set out in the PC set out in annex 4. |
| CCWater | Given the breadth and strength of support for improving bathing water, CCWater hope that a means of gaining confidence that customers' money is being spent appropriately can be found while ensuring the delivery of significant improvements in bathing water quality within the next five years. | As set out above, we have accepted the special cost factor claim. |
| Southern Water | For the cost claim for Woolston sewerage treatment works, Southern Water has provided further evidence. The overall cost has remained the same, although the proportion of on-cost has reduced as the project has matured. The company presents evidence it considers shows that the level of on-costs are better than average of the industry comparators. | The company provided additional information on its costs but we consider this was evidence of average rather than upper quartile efficiency and so we recommend retaining the upper quartile adjustment for costs. Our assessment is: Need: Pass Cost benefit analysis: Pass Robust Costs: Partial pass |

| Respondent | Summary of comment | Ofwat response |
|----------------|--|---|
| Southern Water | For the cost claim for the Millbrook sludge scheme Southern Water provided a further explanation for the level of the on-cost and how the proportion would change as the scheme developed without necessarily affecting the overall expenditure. It highlighted that the scheme was 15% lower than the cost calculated by the Ofwat unit cost model. | We note the companies views, but it did not provide any independent evidence on the efficiency of costs for this particular scheme and so we recommend retaining the upper quartile efficiency adjustment Our assessment is: Need: Pass Cost benefit analysis: Pass Robust Costs: Partial pass |
| Southern Water | For the cost claim for the Thanet ground water protection scheme Southern Water provided a complete cost breakdown for the project, which is built up from latest competitive tender cost information. As a result of this and further work on costs it has been able to reduce the cost of the scheme by £9 million. | We are concerned with the proposed costs and in particular the evidence for the on-costs being efficient was insufficient and unconvincing. We made no adjustment to the draft determination position. Need: Pass Cost benefit analysis: Pass Robust Costs: Partial pass |

Following representations, the company’s proposed wholesale wastewater totex is £1,929 million over 2015-20 (versus £2,029 million in its December plan). This is 2% above the final determination threshold (post additions) of £1,890 million.

The wholesale wastewater allowed expenditure for Southern Water is detailed in table A3.4 below. A further breakdown of some of the calculations is provided in annex 1. Further information about our assessment of each claim is set out in the populated version of the final determination cost threshold models.

Table A3.4 Wholesale wastewater allowed expenditure (£ million)

| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---------|---------|---------|---------|---------|---------|
| Final determination cost threshold | | | | | | 1,889.7 |
| Costs excluded from menu | 5.7 | 5.5 | 5.5 | 5.5 | 5.5 | 27.9 |
| Menu cost baseline ¹ | 365.4 | 400.9 | 392.7 | 367.7 | 335.2 | 1,861.8 |
| Company's view of menu costs ² | | | | | | 1,899.6 |
| Implied menu choice | | | | | | 102.0 |
| Allowed expenditure from menu | 367.3 | 402.9 | 394.7 | 369.5 | 336.9 | 1,871.3 |
| Costs excluded from menu | 5.7 | 5.5 | 5.5 | 5.5 | 5.5 | 27.9 |
| Total allowed expenditure ³ | 373.0 | 408.5 | 400.2 | 375.1 | 342.4 | 1,899.2 |
| Less pension deficit repair allowance | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 27.7 |
| Totex for input to PAYG | 367.5 | 402.9 | 394.7 | 369.5 | 336.9 | 1,871.5 |

Notes:

1. Menu baseline is equal to the final determination threshold less pension deficit recovery costs, third party costs and market opening costs related to 2014-15 (see annex 1).
2. Based on company plan totex (reflecting its representation on its draft determination) minus costs for items excluded from the menu. The company will make a final menu choice by 16 January 2016 and any difference between this and the implied menu choice will be reconciled as part of PR19.
3. Includes pension deficit recovery costs.

A3.3.2 Calculation of revenues: PAYG and RCV run-off

In section A6.5, we discuss financeability at an appointee (whole regulated company) level.

Table A3.5 shows the PAYG rates and the amount of totex recovered for wholesale wastewater, which we have used as the basis for this final determination. The 'Resulting PAYG (£m)' is the amount of money recovered from customers in the short term. Table A3.6 shows the RCV run-off amounts included within the wholesale

wastewater charge. This is the amount of money recovered in the long term through the company's RCV.

Table A3.5 Southern Water's wholesale wastewater PAYG rates

| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---------------------|---------|---------|---------|---------|---------|---------|
| Totex (£m) | 367.5 | 402.9 | 394.7 | 369.5 | 336.9 | 1,871.5 |
| PAYG (%) | 47.5% | 44.3% | 43.4% | 43.3% | 52.3% | 46.2% |
| Resulting PAYG (£m) | 174.6 | 178.5 | 171.3 | 160.0 | 176.2 | 860.5 |

Table A3.6 Southern Water's wholesale wastewater RCV run-off (£ million)

| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|--------------------------------|---------|---------|---------|---------|---------|-------|
| Run-off of 2015 RCV | 193.1 | 180.4 | 173.1 | 167.3 | 158.8 | 872.7 |
| RCV run-off of totex additions | 4.0 | 12.7 | 22.0 | 31.1 | 38.8 | 108.6 |
| Total RCV run-off | 197.1 | 193.1 | 195.1 | 198.3 | 197.6 | 981.3 |

A3.3.3 Return on the RCV

As discussed in section A2.3.3, we have used a cost of capital of 3.6% in this final determination. This results in a return on capital of £610.2 million over 2015-20.

Table A3.7 shows our calculation of the opening RCV at 1 April 2015 taking account of the adjustments for 2010-15 performance discussed in section A3.3.4. The average RCV, set out in table A3.8 below for each year, takes into account the proportion of totex additions to the RCV determined by the PAYG rate and RCV run-off as set out in table A3.5 and table A3.6 above.

Table A3.7 Southern Water’s wholesale wastewater opening RCV (£ million)

| | 2015-16 |
|--|---------|
| Closing RCV 31 March 2015 | 3,530.8 |
| Land sales ¹ | 2.6 |
| Adjustment for actual expenditure 2009-10 ² | -84.1 |
| Adjustment for actual expenditure 2010-15 ³ | -29.6 |
| Net adjustment from logging up and logging down ^{3,4} | -1.1 |
| Adjustment for shortfalls ^{3,4} | -5.6 |
| Adjustment for serviceability shortfalls ⁵ | -54.9 |
| Other adjustments ⁶ | 0.0 |
| Opening RCV 1 April 2015 | 3,358.0 |

Notes:

1. Land sales adjustment is set out in table AA3.22.
2. 2009-10 actual expenditure adjustment is set out in table AA3.22.
3. A component of the CIS adjustment as set out in table AA3.18.
4. The net adjustment from the change protocol is set out in table AA3.9.
5. The serviceability shortfall adjustment is set out in table AA3.13.
6. Other RCV adjustments are set out in table AA3.22.

Table A3.8 Southern Water’s wholesale wastewater return on RCV (£ million)

| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
|----------------------------|---------|---------|---------|---------|---------|
| Opening RCV | 3,358.0 | 3,353.9 | 3,385.2 | 3,413.4 | 3,424.6 |
| RCV additions (from totex) | 192.9 | 224.4 | 223.4 | 209.5 | 160.7 |
| Less RCV run-off | 197.1 | 193.1 | 195.1 | 198.3 | 197.6 |
| Closing RCV | 3,353.9 | 3,385.2 | 3,413.4 | 3,424.6 | 3,387.7 |
| Average RCV (year average) | 3,355.9 | 3,369.5 | 3,399.3 | 3,419.0 | 3,406.1 |
| Return on capital | 120.8 | 121.3 | 122.4 | 123.1 | 122.6 |

A3.3.4 Reconciling 2010-15 performance

When we last set price controls at PR09, we included a number of incentive mechanisms designed to encourage companies to improve and deliver services

more efficiently, and, to manage uncertainty. Consistent with the broad approach set out at the time of the final determinations in 2009 we have made adjustments at this price review (PR14) to 2015 to 2020 revenues and the RCV to take account of company performance in the 2010 to 2015 period.

Our approach to reconciling 2010-15 performance is set out in policy chapter A4.

The company proposed adjustments to the opening RCV and allowed revenue for the wholesale wastewater services to reconcile performance in 2010-15. It has also set out that it is prepared to accept a serviceability shortfall of £22.75 million.

We have intervened and as a result the revenue adjustments for wholesale wastewater have changed from £101.1 million to £93.3 million. We summarise these interventions in table A3.9 below, and quantify the resulting adjustments within this final determination.

We have also intervened to apply serviceability shortfalls of £54.9 million. The impact on the opening RCV of 2010-15 adjustments is shown in table A3.7 and we discuss our interventions in this area further in annex 3.

The main changes we have made in the final determination result from our review of our methodology for calculating serviceability shortfalls, which we conducted in light of companies' representations. We have also accepted the company's additional evidence on sewer flooding outputs and back-billing.

When making these final determinations we do not have the full information on companies' performance in 2014-15. We set out in 'Setting price controls for 2015-20 – further information on reconciling 2010-15 performance' that we would reconcile for the RCM, change protocol and serviceability in 2015, and in 2016 for the capital expenditure incentive scheme, when we have the company's actual performance for 2014-15. In carrying out this reconciliation, we will take a proportionate approach (for example, applying materiality thresholds where appropriate) to making adjustments for company's actual performance and implement these changes at the next wholesale price control review in 2019.

Table A3.9 Southern Water’s wholesale wastewater revenue adjustments to reflect 2010-15 performance (£ million)

| Area of intervention | Intervention | Total revenue adjustment 2010-15 (post intervention) | | |
|----------------------|---|--|---------------------|---------------------|
| | | Company view | Draft determination | Final determination |
| SIM | We agree with the company’s underlying calculation of the SIM penalty of -0.7%, but we do not accept the companies’ proposal to include a reduction for improved performance in the third year, because it is not in line with the methodology that we are applying to all companies. | -14.1 | -19.7 | -19.7 |
| RCM | We have intervened to use our view of FD09 assumptions in the calculations, which reduced the revenue adjustment by £0.3 million compared to the company’s representation view of £117.3 million. For the final determination, the company has provided sufficient evidence to support the company proposed adjustment for back-billing that we previously removed at the draft determination. | 119.4 | 110.7 | 117.0 |
| OIA | We substituted our view of the logging up opex adjustments for private sewers, based on capping the company’s high capex/opex ratio at one standard deviation above the industry average. This intervention increased revenue by £1.8 million compared with the company’s June plan. | 24.7 | 26.5 | 26.5 |
| CIS | As explained in policy chapter A4, we have changed the methodology in the CIS model for all companies with respect to the discount rate used when calculating the future value of the revenue adjustment in the 2010-15 period. In carrying out our assessment, we have included our view of the applicable | -28.8 | -33.4 | -30.5 |

| Area of intervention | Intervention | Total revenue adjustment 2010-15 (post intervention) | | |
|----------------------|---|--|---------------------|---------------------|
| | | Company view | Draft determination | Final determination |
| | change protocol amounts for water and wastewater. Combined, these interventions reduced revenue by £1.7 million compared with the company's June plan. | | | |
| Other adjustments | There are no interventions in this area. | 0.0 | 0.0 | 0.0 |

A3.3.5 Calculation of allowed revenue

The calculation of the allowed revenue for Southern Water's wholesale wastewater control is shown in table A3.10.

Overall, Southern Water's wholesale wastewater revenue allowance will be £508.2 million in 2015-16, increasing by 2.4% to £520.4 million in 2019-20.

Table A3.10 Southern Water's wholesale wastewater allowed revenue (£ million)

| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---------|---------|---------|---------|---------|---------|
| Totex | 367.5 | 402.9 | 394.7 | 369.5 | 336.9 | 1,871.5 |
| PAYG rate | 47.5% | 44.3% | 43.4% | 43.3% | 52.3% | |
| Totex additions to the RCV | 192.9 | 224.4 | 223.4 | 209.5 | 160.7 | 1,011.0 |
| RCV (year average) | 3,355.9 | 3,369.5 | 3,399.3 | 3,419.0 | 3,406.1 | |
| Wholesale allowed revenue build up: | | | | | | |
| PAYG ¹ | 180.1 | 184.0 | 176.8 | 165.5 | 181.7 | 888.2 |
| Return on capital | 120.8 | 121.3 | 122.4 | 123.1 | 122.6 | 610.2 |
| RCV run-off | 197.1 | 193.1 | 195.1 | 198.3 | 197.6 | 981.3 |
| Tax ² | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Income from other sources ^{3,4} | -6.0 | -5.9 | -5.9 | -5.8 | -5.7 | -29.4 |
| Reconciling 2010-15 performance | 20.0 | 20.0 | 20.0 | 20.0 | 13.4 | 93.3 |
| Ex ante additional menu income | -0.9 | -1.0 | -1.0 | -0.9 | -0.9 | -4.8 |
| Wholesale allowed revenue adjustments: | | | | | | |
| Equity Issuance Cost | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Revenue solving adjustment | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Profiling adjustments ⁵ | -8.6 | -7.2 | 0.3 | 11.0 | 6.1 | 1.6 |

| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|--------------|--------------|--------------|--------------|--------------|----------------|
| Capital contributions from connection charges and revenue from infrastructure charges | 5.7 | 5.5 | 5.9 | 5.9 | 5.7 | 28.8 |
| Final allowed revenues | 508.2 | 509.8 | 513.6 | 517.2 | 520.4 | 2,569.2 |

Notes:

1. PAYG includes the PAYG calculated from totex and the pension deficit repair allowance.
2. Including tax on adjustments for reconciling 2010-15 performance and ex ante additional menu income.
3. We have adjusted other income values to remove the deferred income element relating to IFRIC18, as this is an accounting adjustment.
4. Our assessment of income from other sources is discussed in policy chapter A3.
5. Our bill profiling adjustments are discussed in section A6.6.

A3.4 Uncertainty mechanisms

We have set the company's allowed revenues for the 2015-20 period. All companies face uncertainty about future costs and revenues, and this is reflected in the rate of return and the established framework in the licence.

We outline our approach to incremental uncertainty mechanisms in policy chapter A7, where we set out our response to the representations made by stakeholders in support of sector wide uncertainty mechanisms.

In Table A3.11 below, we set out our assessment of Southern Water's proposed wholesale wastewater uncertainty mechanisms.

Table A3.11 Southern Water’s wholesale wastewater uncertainty mechanisms

| Assessment at draft determination | Our final assessment |
|---|--|
| <p>No uncertainty mechanisms for wholesale wastewater were included in our draft determination, but Southern Water proposed that we should include one for wastewater business rates.</p> | <p>We consider that a sewerage business rates uncertainty mechanism does not comply with the test that we have set out for uncertainty mechanisms.</p> <p>Materiality: Southern Water forecast an incremental cost of £12m over the period, which is less than 1% of service totex and so we do not consider that the risk is material.</p> <p>Comparability: Southern Water has not provided evidence on why this risk is materially different from other companies or why it requires specific protection.</p> <p>Interests of customers: The company has not shown why it is in the interests of customers to allow an uncertainty mechanism in this area.</p> <p>Control: We accept that Southern Water has limited control over its business rates.</p> |

A4 Household retail

A4.1 Consideration of representations on our draft determinations

In policy chapter A1, we provide a list of the respondents to the draft determinations published in April, May and August of this year. We have fully considered all of the responses received, and where appropriate, we have made either consequential adjustments to our industry-wide approach or company-specific interventions.

Our general policies relevant to the household retail control are set out in the following policy chapters that accompany our final determinations. These include our responses to representations on sector-wide issues.

- Policy chapter A2
- [‘Policy chapter A5 – household retail costs and revenues’](#) (‘policy chapter A5’).
- Policy chapter A7.

Table A4.1 lists the representations we have received that are specific to Southern Water’s household retail control and sets out where to find more information on our responses in this document.

Table A4.1 Representations specific to the household retail control of Southern Water

| Area | Company-specific representations | Detailed commentary in this company-specific appendix |
|--------------------------------|----------------------------------|---|
| Outcomes, PCs and incentives | Southern Water | Annex 4 |
| Outcome delivery and reporting | None | Annex 4 |
| ACTS calculation | Southern Water | Section A4.3.4 |
| Allocation of costs | Southern Water | Section A4.3.1 |
| Adjustments | Southern Water | Section A4.3.2 and annex 2 |
| New costs | None | Section A4.3.3 |
| Uncertainty mechanisms | None | Section A4.5 |

A4.2 Outcomes, performance commitments and incentives

In policy chapter A2, we discuss our approach to outcomes for the wholesale and retail controls. Southern Water has developed and committed to delivering outcomes that reflect its customers' views.

The company's outcomes have been developed with input from its CCG. The CCG's role was to challenge how well the company's outcomes, PCs and delivery incentives reflect the views and priorities of customers, both now and in the future, as well as environmental priorities.

Our assessment of the specific PCs proposed by each company for household retail has focused on a bottom-up assessment to ensure that the performance proposed by each company is challenging, appropriately incentivised and supported by customer engagement.

We summarise the outcomes, PCs and ODIs for the household retail control for Southern Water in table A4.2 below.

For some PCs and incentives types, we have intervened to change the underlying performance level or incentives. Where we have intervened, we have done so to ensure that companies are subject to effective incentives that protect customers against under-delivery and where merited, reward companies for outperformance. We summarise any interventions in table A4.2. Full detail of the household retail PCs and incentives, and our consideration of relevant representations, is provided in annex 4

Table A4.2 Household retail outcomes, performance commitments and incentives

| Company proposal | | | Intervention |
|--|---|--------------------------------|--|
| Outcome | Performance commitment | Incentive type | |
| Responsive customer service Better information and advice | First time resolution of customer contacts | Non-financial – reputational | No intervention |
| | Dealing with customers' individual needs – customer survey. | Non-financial – reputational | No intervention |
| | Where your money goes – customer survey. | Non-financial – reputational | No intervention |
| | Awareness of water hardness | Non-financial – reputational | No intervention |
| Affordable bills | Billing queries | Non-financial – reputational | No intervention |
| | Take-up of assistance schemes | Non-financial – reputational | No intervention |
| | Value-for-money survey | Non-financial – reputational | No intervention |
| | SIM | Financial – reward and penalty | Comparative assessment – PC added (industry-wide incentive) |
| | Where your money goes – customer survey. | Non-financial – Reputational | No intervention |

A4.3 Costs

Our approach to the household retail control is set out in policy chapter A5. We have adjusted companies' costs to align to the 2013-14 base year. Historic costs are therefore presented in 2013-14 prices, and all future costs and revenues in nominal prices. We set out our final household retail adjustments, the modification factors for household retail allowed revenue and the assumed number of customers we have used to calculate the total revenues in annex 2.

Southern Water made a representation on the price base that we use for setting household retail price controls. The company's representation is discussed alongside representations made by other companies in policy chapter A5. We have taken these representations into consideration and can confirm that the household retail price controls will be set using the 2013-14 price base.

Southern Water has also made representations on how the ACTS is calculated. In particular, the company has represented on the treatment of depreciation of legacy assets.

The company's representations are discussed alongside representations made by other companies in policy chapter A5. We have taken this representation into consideration and present our conclusions on whether changes to the ACTS methodology are needed in policy chapter A5.

A4.3.1 Allocation of costs

Table A4.3 below summarises our final assessment of Southern Water's cost allocation methodology.

Table A4.3 Our assessment of Southern Water's cost allocation methodology

| Area assessed | Our final assessment |
|---|----------------------|
| No potential material misallocations | Pass |
| Adequate assurance provided | Fail |
| Reconciliation to regulatory accounts and December business plan provided | Pass |

We stated in the draft determination that we were not satisfied with the scope of the company's external assurance report over its cost allocations. We noted that the

assurance report gave us assurance over new and changed data since the December submission, but did not give us any assurance over any areas which are not new or have not changed since the December submission. And that this was of concern to us as the company did not obtain any assurance over the cost allocations in its December submission.

The company has now provided us with its external assurance report covering its December submission. However, this does not give us assurance over the allocation of its costs between retail and wholesale and between household and non-household retail. Therefore, the issue that we raised in the draft determination remains for final determination. We have therefore scrutinised this area carefully as we could not place confidence in the assurance.

Following our review, we are satisfied that the company has allocated costs appropriately and have therefore used the company's cost allocation between retail and wholesale and between household and non-household retail to set our final determination.

A4.3.2 Adjustments

In its revised business plan, submitted in June 2014, Southern Water sought adjustments to the ACTS for:

- pension deficit repair costs;
- an adjustment for bad debt driven by deprivation and bill size; and
- an adjustment for input price pressure.

Pension deficit repair costs

In the final determination we have included an adjustment for all companies to reflect the pension deficit recovery costs that our modelling shows is appropriate for household retail as set out in [IN 13/17 'Treatment of companies' pension deficit repair costs at the 2014 price review](#)'.

Bad debt

In the final determination for Southern Water, we have not included an adjustment to the ACTS for bad debt driven by deprivation and bill size. A summary of our assessment is set out in table A4.4 and we include further details in annex 2. Our final assessment is unchanged from the draft determination.

Table A4.4 outlines our assessment of Southern Water’s proposed ACTS adjustments. The value of the adjustments we have accepted in our final determination is summarised in table A4.5. Further details on our assessment are set out in annex 2 – Household retail.

Input price pressure

In the final determination for Southern Water, we have not included an adjustment to the ACTS for input price pressure.

Table A4.4 outlines our assessment of Southern Water’s proposed ACTS adjustment. The value of the adjustments we have accepted in our final determination is summarised in table A4.5.

Further details on our assessment are set out in Annex 2 – Household retail. Our approach to assessing adjustment claims is set out in policy chapter A5.

Table A4.4 Our assessment of Southern Water’s proposals for ACTS adjustments

| | | Adjustment assessment criteria | | | |
|----------------------|-------------------------|--------------------------------|-------------------------------------|--|---------------------------------|
| Adjustment | Value (£m over 2015-20) | Materiality | Beyond efficient management control | Impact company in materially different way | Value of adjustment appropriate |
| Bad debt | 12.6 | Pass | Pass | Fail | N/a |
| Input price pressure | 12.9 | Pass | Pass | Efficiency benchmarking evidence: Fail | N/a |
| | | | | Upper quartile: Fail | |

Notes:

1. The four criteria used in our final assessment are the same for all proposed adjustments to the ACTS
 2. For household retail materiality is defined as being 2.25% of household retail opex plus depreciation over 2015-20
- There will be no automatic indexation for retail price controls to RPI.

Table A4.5 Household retail adjustments (£ million, nominal prices)

| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|--|--------------|--------------|--------------|--------------|--------------|--------------|
| Adjustments included in final determination | | | | | | |
| Doubtful debt | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Input price pressure (AMP5) | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Input price pressure (AMP6) | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Pension deficit repair costs | 0.777 | 0.777 | 0.777 | 0.777 | 0.777 | 3.884 |
| Adjustments included in final determination | 0.777 | 0.777 | 0.777 | 0.777 | 0.777 | 3.884 |

A4.3.3 New costs

Southern Water did not propose material household retail new costs. The value of any modification for immaterial new costs is quantified in table A4.6.

Table A4.6 New household retail costs (£/customer)

| | Value |
|---|-------|
| Modification made to 2013-14 cost to serve for ACTS calculation | 0.00 |

Note: There will be no indexation for retail price controls.

A4.3.4 Overall efficiency challenge

Southern Water argued that we should consider the scale of the efficiency challenge for household retail that results from our methodology in the round, as they consider that the total efficiency challenge for household retail is unachievable for the company.

These arguments are also used to specifically support the company's request for an input price pressure adjustment. Unlike other companies that requested input price pressure adjustments, Southern Water used its benchmarking analysis to argue that they are sufficiently inefficient that the scale of the ACTS efficiency challenge would be too great for the company to meet without the adjustment.

We have considered the company's arguments in relation to the input price pressure adjustment and the overall level of the efficiency challenge and our conclusion remains unchanged.

As set out in section A6.5, Ofwat's duties require that we ensure the financeability of efficient companies.

The methodology for setting household retail price controls allows companies with costs above the ACTS a three-year glide-path down to the ACTS. We consider these allowed revenues to be sufficient to fund an efficient retail business, including absorbing input price pressures up until 2019-20.

We have considered Southern Water's position relative to other companies in household retail. Comparing the revenues companies requested to the revenues excluding net margins that we have allowed, three companies face a higher efficiency challenge than Southern Water for household retail.

We have also considered regulatory decisions in the area from other sectors. '[Impact of Business Change on a Firm's Support, Operations, Maintenance and Renewal Costs](#)', a report by a consultant for the Office of the Rail Regulator (ORR) investigates the changes in costs achieved by a number of companies in response to "change events", such as industry change, mergers or acquisition, a reduction or increase in the scale of operations, a change in the supply chain or a significant event or accident. This report shows that several companies, including Tubelines, United Airlines and Scottish and Southern Electric managed to achieve cost reductions of a similar order of magnitude to the efficiency challenge for Southern Water.

We therefore do not consider that Southern Water's overall efficiency challenge for household retail is unachievable.

A4.3.5 Base year for ACTS

In the draft determination, we intervened to use the Southern Water's costs per customer for 2012-13 instead of those provided for 2013-14. This was because there were a number of one-off costs in 2013-14 that did not appear to be representative of ongoing costs relevant for setting price controls in the next period.

In its representation, Southern Water provided additional evidence to demonstrate that while 2013-14 costs were atypically high, 2012-13 costs were atypically low and so using these costs was also unrepresentative. The company provided evidence on an appropriate adjustment for one-off costs in 2013-14 to make these costs

representative of an average cost year as part of its representation. We have accepted the company's representation and have used 2013-14 costs adjusted for one-off costs in that year for calculating the ACTS, consistent with our treatment of other companies' costs.

A4.4 Calculating the allowed revenues

As set out in policy chapter A5, total allowed household retail revenues are calculated taking account of our assessment of the cost to serve per customer (after the impact of our efficiency challenge), the projected customer numbers in the company's revised business plan and the household retail net margin.

The company proposed a net margin of 1%. This is in line with our risk and reward guidance and our further consideration of margins following representations on the draft determinations. We have therefore accepted the company's proposals.

Table A4.7 Household retail net margins (%)

| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
|-----------------------------|---------|---------|---------|---------|---------|
| Household retail net margin | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% |

Table A4.8 below sets out the components of the allowed household retail revenue. We set out the household retail revenue modification in Annex 2.

Table A4.8 Components of the allowed household retail revenue (nominal prices)

| | 2013-14 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
|---|---------|---------|---------|---------|---------|---------|
| Company cost to serve (£/customer) | | | | | | |
| Unmetered single service customers | 31.1 | | | | | |
| Unmetered water and wastewater customers | 40.5 | | | | | |
| Metered water only customers | 38.8 | | | | | |
| Metered wastewater only customers | 36.0 | | | | | |

| | 2013-14 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
|---|---------|---------|---------|---------|---------|---------|
| Metered water and wastewater customers | 46.1 | | | | | |
| Industry ACTS (£/customer) | | | | | | |
| Unmetered single service customers | | | 21.47 | | | |
| Unmetered water and wastewater customers | | | 27.91 | | | |
| Metered water only customers | | | 27.26 | | | |
| Metered wastewater only customers | | | 25.54 | | | |
| Metered water and wastewater customers | | | 34.26 | | | |
| Allowed cost to serve¹ (£/customer) | | | | | | |
| Unmetered single service customers | | 24.3 | 23.6 | 21.6 | 19.6 | 20.1 |
| Unmetered water and wastewater customers | | 31.5 | 30.7 | 28.1 | 25.5 | 26.1 |
| Metered water only customers | | 27.9 | 27.3 | 25.0 | 23.0 | 23.2 |
| Metered wastewater only customers | | 28.8 | 27.8 | 25.6 | 23.3 | 23.7 |
| Metered water and wastewater customers | | 35.4 | 34.5 | 31.6 | 29.0 | 29.3 |
| Total allowed (£m) | | | | | | |
| Cost to serve (excluding net margin) | | 58.5 | 57.5 | 53.3 | 49.2 | 50.5 |
| Forecast household | | 645.8 | 669.2 | 692.2 | 714.6 | 742.4 |

| | 2013-14 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
|---|---------|---------|---------|---------|---------|---------|
| wholesale charge (including forecast RPI ²) ³ | | | | | | |
| Household retail revenue (including an allowance for the net margin) ⁴ | | 65.0 | 64.2 | 60.2 | 56.4 | 57.9 |

Notes:

There will be no indexation for retail price controls. However, the wholesale price controls are indexed linked to RPI. This will affect the retail net margin.

1. Allowed cost to serve includes pension deficit repair costs.
2. The household wholesale charge includes forecast RPI so that the total household retail revenue can be displayed on the same price base as other retail costs.
3. The allocation of allowed wholesale revenue to different wholesale charges will be at the company's discretion, subject to charging rules and licence conditions, however, our assumed allocation of wholesale revenue is binding for the purposes of determining the allowance for the net margin which is one component of allowed household retail revenue.
4. This number is indicative, as allowed revenue will depend upon actual customer numbers.

A4.5 Uncertainty mechanisms

We outline our approach to uncertainty mechanisms in policy chapter A7.

Southern Water did not propose any household retail uncertainty mechanisms beyond those that will already form part of the regulatory framework for 2015-20.

A5 Non-household retail

In ‘Policy chapter A6 – non-household retail costs and revenues’ (policy chapter A6’), we outline our overall approach to the non-household retail price control.

A5.1 Consideration of representations on our draft determinations

In policy chapter A1, we provide a list of the respondents to the draft determinations published in April, May and August of this year. We have fully considered all of the responses received, and where appropriate, we have made either consequential adjustments to our industry-wide approach or company-specific interventions.

Our general policies relevant to the non-household control are set out in the policy chapter A6. This includes our responses to representations on sector-wide issues.

Table A5.1 lists the representations we have received that are specific to Southern Water’s non-household retail control and sets out where to find more information on our responses in this document.

Table A5.1 Representations specific to the non-household retail control of Southern Water

| Area | Company-specific representations | Detailed commentary in this company-specific appendix |
|-----------------|----------------------------------|---|
| Net margins | Southern Water | Section A5.3 |
| Cost proposals | Southern Water | Section A5.4 |
| Form of control | Southern Water CCG | Section A5.5 |

A5.2 Indicative non-household retail total revenue

Table A5.2 below shows the indicative total of non-household allowed revenue. The table is indicative, as it does not assume any gains or losses from competition or allow for the possibility that the company may choose to charge customers at levels which differ to the relevant default tariffs for the projected customers in each customer type. Furthermore, the controls for each customer type that we have set

now will only apply for two years; there will be a review in 2016. Years 2017-18 to 2019-20 below are shown for illustrative purposes only.

Table A5.2 Indicative non-household retail total revenue price control including net margins (£ million, nominal prices)

| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
|---|---------|---------|---------|---------|---------|
| Indicative non-household retail total revenue price control including net margins | 8.6 | 8.8 | 8.9 | 9.0 | 9.2 |

Note: There will be no indexation for retail price controls from this price base. The non-household wholesale charge includes forecast RPI so that the total non-household retail revenue can be displayed in the same price base as other retail costs. Figures exclude retail services to developers and revenues associated with miscellaneous charges.

A5.3 Net margins

We have accepted the company's proposed net margins that equal 2.5% in aggregate. This is in line with our risk and reward guidance and our further consideration of margins following representations on draft determinations.

As part of its representations, the company proposed new net margin allocations between its customer types. The updates flowed from updated metering and customer assumptions. Upon reviewing the proposed changes, we did not identify any concerns with the company's proposals. We have therefore accepted the company's proposals.

A5.4 Cost proposals

As part of its representations, the company proposed new cost allocations between its customer types. The updates flowed from updated metering and customer assumptions. Upon reviewing the proposed changes, we did not identify any concerns with the company's proposals. We have therefore accepted the company's proposals.

As set out in policy chapter A6, we have adjusted companies' costs to align to the 2013-14 base year. Historical costs are therefore presented in 2013-14 prices, and all future costs and revenues in nominal prices. We expect our decisions on the total level of non-household retail costs now, will still apply for years 2017-18 to 2019-20 –

the 2016 review will focus on the allocations between different non-household customer types. As noted in section A4.3.1, we are not satisfied with the scope of the external assurance report for retail cost allocation, and have therefore scrutinised this area carefully.

In IN 13/17: 'Treatment of companies' pension deficit repair costs at the 2014 price review' we explained how we would treat the costs associated with water companies reducing the deficits in their defined benefit pension schemes at the 2014 price review. Where companies' proposals have differed from our calculations, we have over-written their proposals in line with our overall approach. As a result, we adjusted the company's proposals from £0.295 million over the control period to £0.623 million.

In total, we adjusted the company's proposed costs from £25.736 million over the control period to £26.064 million.

A5.5 Form of control

In ['Setting price controls for 2015-20, Draft price control determination notice: technical appendix A5 – non-household retail'](#), we recognised that some companies could benefit from having further time to consider and address any issues ahead of the introduction of competition into the non-household retail market in April 2017.

Our final determination on the form of control is set out in policy chapter A6. In that document, we confirm the basic form of control set out in our final methodology statement, but with a two-year initial duration and with a review in 2016.

A5.6 Average revenue controls

The allowed average retail cost component (£) and the allowed net margin (%) for each customer type are shown in the table below for Southern Water.

The average retail revenue per customer – £ (r) – is also shown. For the avoidance of doubt, it is the average cost component and the allowed net margin that make up the non-household retail control. The average retail revenue per customer is shown only to help comparisons to be drawn.

Table A5.1 Non-household retail average controls per customer

| Customer type | Units | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
|---|-------|----------|----------|----------|----------|----------|
| Standard Water – Unmetered | £ | 12.17 | 12.29 | 12.29 | 12.41 | 12.41 |
| | % | 2.6% | 2.2% | 2.2% | 2.2% | 2.2% |
| | £ (r) | 18.03 | 17.31 | 17.45 | 17.72 | 17.88 |
| Standard 0-1MI p.a. Water Metered | £ | 23.08 | 23.30 | 23.30 | 23.52 | 23.52 |
| | % | 6.4% | 6.5% | 6.5% | 6.5% | 6.5% |
| | £ (r) | 35.53 | 35.93 | 36.25 | 36.82 | 37.19 |
| Standard 1-5MI p.a. Water Metered | £ | 80.65 | 81.43 | 81.43 | 82.19 | 82.20 |
| | % | 2.9% | 2.9% | 2.9% | 2.9% | 2.9% |
| | £ (r) | 152.75 | 154.92 | 157.07 | 160.10 | 162.49 |
| Standard 5-20MI p.a. Water Metered | £ | 199.95 | 201.86 | 201.87 | 203.76 | 203.77 |
| | % | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% |
| | £ (r) | 397.12 | 402.97 | 408.89 | 417.04 | 423.64 |
| Standard 20-100MI p.a. Water Metered | £ | 317.79 | 320.84 | 320.85 | 323.86 | 323.87 |
| | % | 1.4% | 1.4% | 1.4% | 1.4% | 1.4% |
| | £ (r) | 633.74 | 643.21 | 652.83 | 665.99 | 676.70 |
| Standard Over 100MI p.a. Water Metered | £ | 1,903.83 | 1,922.10 | 1,922.16 | 1,940.19 | 1,940.28 |
| | % | 0.7% | 0.7% | 0.7% | 0.7% | 0.7% |
| | £ (r) | 3,982.17 | 4,043.77 | 4,107.72 | 4,193.10 | 4,264.19 |
| Standard Sewerage Unmetered | £ | 15.00 | 15.14 | 15.14 | 15.29 | 15.29 |
| | % | 2.1% | 2.0% | 2.0% | 2.0% | 2.0% |
| | £ (r) | 23.41 | 23.18 | 23.41 | 23.80 | 24.06 |
| Standard 0-1MI p.a. Sewerage Metered | £ | 25.20 | 25.44 | 25.44 | 25.68 | 25.68 |
| | % | 3.7% | 3.7% | 3.7% | 3.7% | 3.7% |
| | £ (r) | 39.19 | 39.65 | 40.05 | 40.71 | 41.16 |
| Standard 1-5MI p.a. Sewerage Metered | £ | 95.13 | 96.05 | 96.05 | 96.95 | 96.96 |
| | % | 2.1% | 2.1% | 2.1% | 2.1% | 2.1% |

| Customer type | Units | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
|--|-------|----------|----------|----------|----------|----------|
| | £ (r) | 181.60 | 184.22 | 186.83 | 190.48 | 193.38 |
| Standard 5-20MI p.a. Sewerage Metered | £ | 246.00 | 248.36 | 248.36 | 250.69 | 250.70 |
| | % | 1.8% | 1.8% | 1.8% | 1.8% | 1.8% |
| | £ (r) | 491.14 | 498.45 | 505.87 | 516.03 | 524.31 |
| Standard 20-100MI p.a. Sewerage Metered | £ | 503.25 | 508.08 | 508.10 | 512.86 | 512.89 |
| | % | 1.6% | 1.6% | 1.6% | 1.6% | 1.6% |
| | £ (r) | 1,033.29 | 1,048.96 | 1,065.08 | 1,086.84 | 1,104.79 |
| Standard Over 100MI p.a. Sewerage Metered | £ | 1,965.18 | 1,984.04 | 1,984.10 | 2,002.71 | 2,002.80 |
| | % | 0.5% | 0.5% | 0.5% | 0.5% | 0.5% |
| | £ (r) | 4,126.49 | 4,190.53 | 4,257.11 | 4,345.84 | 4,419.84 |
| Standard Non-Monthly Billed Trade Effluent Metered | £ | 47.82 | 48.28 | 48.28 | 48.73 | 48.74 |
| | % | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% |
| | £ (r) | 64.76 | 65.46 | 65.97 | 66.97 | 67.54 |
| Standard Monthly Billed Trade Effluent Metered | £ | 376.92 | 380.54 | 380.55 | 384.12 | 384.14 |
| | % | 0.5% | 0.5% | 0.5% | 0.5% | 0.5% |
| | £ (r) | 533.31 | 539.42 | 544.19 | 552.77 | 558.08 |

A6 Appointee financeability and affordability

In this section, we discuss at an appointee level:

- bills and K factors;
- RoRE;
- financeability; and
- affordability.

However, we first consider the responses to our draft determinations that are specific to Southern Water's treatment in these areas below.

A6.1 Consideration of representations on our draft determinations

In policy chapter A1, we provide a list of the respondents to the draft determinations published in April, May and August of this year. We have fully considered all of the responses received, and where appropriate, we have made either consequential adjustments to our industry-wide approach or company-specific interventions.

Our general policies relevant at appointee level are set out in the following policy chapters that accompany our final determinations. These include our responses to representations on sector-wide issues.

- Policy chapter A7.
- Policy chapter A8.

Table A6.1 lists the representations we have received that are specific to Southern Water at an appointee level and sets out where to find more information on our responses in this document.

Table A6.1 Representations specific to issues at an appointee level for Southern Water

| Area | Company-specific representations | Detailed commentary in this company-specific appendix |
|---|----------------------------------|---|
| Bills and K factors | Southern Water | Section A6.2 |
| Appointee level uncertainty and gain share mechanisms | None | Section A6.3 |

| Area | Company-specific representations | Detailed commentary in this company-specific appendix |
|----------------|----------------------------------|---|
| RoRE range | None | Section A6.4 |
| Financeability | Southern Water CCWater | Section A6.5 |
| Affordability | CCWater | Section A6.6 |

A6.2 Bills and K factors

Table A6.2 below sets out the allowed revenues we have assumed in our final determination for Southern Water to deliver its:

- statutory duties; and
- associated PCs.

It also sets out the average customer bills on the basis of the final determination. Average bills are shown without the impact of inflation and are indicative, as final bills will depend on the growth in the number of customers, changes in their usage and the specific charges that the company sets each year within the overall price controls that we have determined.

Table A6.2 Southern Water’s final determination – K factors, allowed revenues and customer bills¹

| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---------|---------|---------|---------|---------|---------|
| Wholesale water – allowed revenues (£m) ² | 161.4 | 162.0 | 163.4 | 163.9 | 164.6 | 815.3 |
| Wholesale water – K (%) ³ | 0.0% | 1.0% | 1.0% | 0.1% | 0.2% | - |
| Wholesale wastewater – allowed revenues (£m) ² | 508.2 | 509.8 | 513.6 | 517.2 | 520.4 | 2,569.2 |
| Wholesale wastewater – K (%) ³ | 0.0% | 0.9% | 0.9% | 0.5% | 0.5% | - |
| Retail household allowed revenue (£m) | 65.0 | 64.2 | 60.2 | 56.4 | 57.9 | 303.7 |

| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|------------|------------|------------|------------|------------|----------|
| Retail non-household expected revenue (£m) | 8.6 | 8.8 | 8.9 | 9.0 | 9.2 | 44.5 |
| Average household bill – water (£) | 151 | 150 | 148 | 147 | 147 | - |
| Average household bill – wastewater (£) | 258 | 258 | 256 | 254 | 254 | - |
| Average household bill – combined (£)^{3, 4} | 388 | 387 | 385 | 383 | 383 | - |

Notes:

1. Wholesale figures in 2012-13 prices as revenue will be affected by inflation and retail figures in nominal prices as revenue will not be affected by inflation.
2. The allowed revenue for our final determination is based on an implied menu choice. The company will have the opportunity to make its own menu choice, which will impact on its allowed revenues and customers' bills from 2020. Customer bills in the regulatory period from 2020 will also be affected by Southern Water's performance in the forthcoming regulatory period in relation to costs and the regulatory incentives in place for performance delivery and revenue projection performance.
3. The average combined household bill is not equal to the sum of the average household water bill and the average household wastewater bill due to the use of the economies of scope factor in the household retail price control.
4. It should be noted the average household bill illustrated above reflects a notional allocation (by Ofwat but based on the company's split of household and non-household customers) of the overall wholesale revenue requirement across Southern Water's household and non-household customer base. In practice, this will depend upon the structure of wholesale charges implemented by Southern Water.

As discussed in policy chapter A3, K is set to zero for 2015-16 for wholesale water and wastewater because there are no directly equivalent wholesale revenues for 2014-15 (on account of the new price review structure). As such, there is no existing reference point against which to express a change in K.

The base (2014-15) revenue allowance we have set is the financial year average revenue for 2015-16 adjusted for inflation. We set this out for Southern Water in the table below.

Table A6.3 Southern Water's allowed wholesale revenue for 2014-15

| Southern Water | Wholesale Water | Wholesale Wastewater |
|---|-----------------|----------------------|
| Allowed wholesale revenue 2014-15 (£ million) | 170.3 | 536.1 |

A6.3 Uncertainty and gain share mechanisms

We outline our approach to uncertainty mechanisms and “pain and gain share” in policy chapter A7. In table A6.4 below, we set out Southern Water’s proposed appointee level uncertainty mechanisms and our assessment of these proposals.

Table A6.4 Southern Water proposals for appointee level uncertainty and gain share mechanisms

| Southern Water proposals | Our assessment |
|--|---|
| In our draft determination, we did not provide for any appointee level uncertainty mechanism for Southern Water, nor did Southern Water propose any gain share mechanisms. Southern Water has not objected to our approach in the draft determination. | No change to draft determination position on uncertainty mechanisms given that we have not provided for any mechanism and the company has not objected. |

A6.4 RoRE range

Southern Water has estimated the range of returns on regulatory equity (RoRE) that it could earn dependent on its performance and external risk factors over the price control period. The RoRE range reflects the company’s views and is based on an efficient company with the notional capital structure.³ We have identified the RoRE impact separately for ODIs, totex performance, financing and the SIM. We note that Southern Water’s actual returns may differ from notional returns due to differences between notional and actual capital structure and notional and actual cost of debt and level of cost efficiency compared to allowed totex and household retail ACTS.

Table A6.5 Whole company RoRE range

| | Lower bound (%) – appointee | Upper bound (%) – appointee |
|---------|--------------------------------|--------------------------------|
| Overall | -4.9% | +2.3% |
| ODIs | -2.1% | +0.3% |

³ The notional capital structure is the capital structure that reflects Ofwat’s assumption of an appropriate level of gearing to use in determining the allowed WACC.

| | Lower bound (%) – appointee | Upper bound (%) – appointee |
|-----------|--------------------------------|--------------------------------|
| Totex | -2.1% | +1.5% |
| Financing | -0.5% | +0.5% |
| SIM | -0.2% | +0.1% |

Commentary:

The whole company RoRE range is from 0.7% to 7.9%, with a base case of 5.6%. This translates to a downside impact of -4.9% and an upside variance of +2.3% as shown in the table. We have modified the draft determination RoRE range to exclude additional returns from non-household retail control to be consistent with approach in our risk and reward guidance. This lowers the base case returns from 5.7% to 5.6%.

Southern Water’s totex risk range is unchanged since our draft determination. The company has modelled totex variance by applying a Monte Carlo methodology to detailed data about its underlying cost drivers and to macro-economic variables. We consider its approach to be robust and the resultant RoRE impacts, ranging from -2.1% to +1.5%, are broadly in line with other companies. We have not adjusted its estimate to account for our totex interventions.

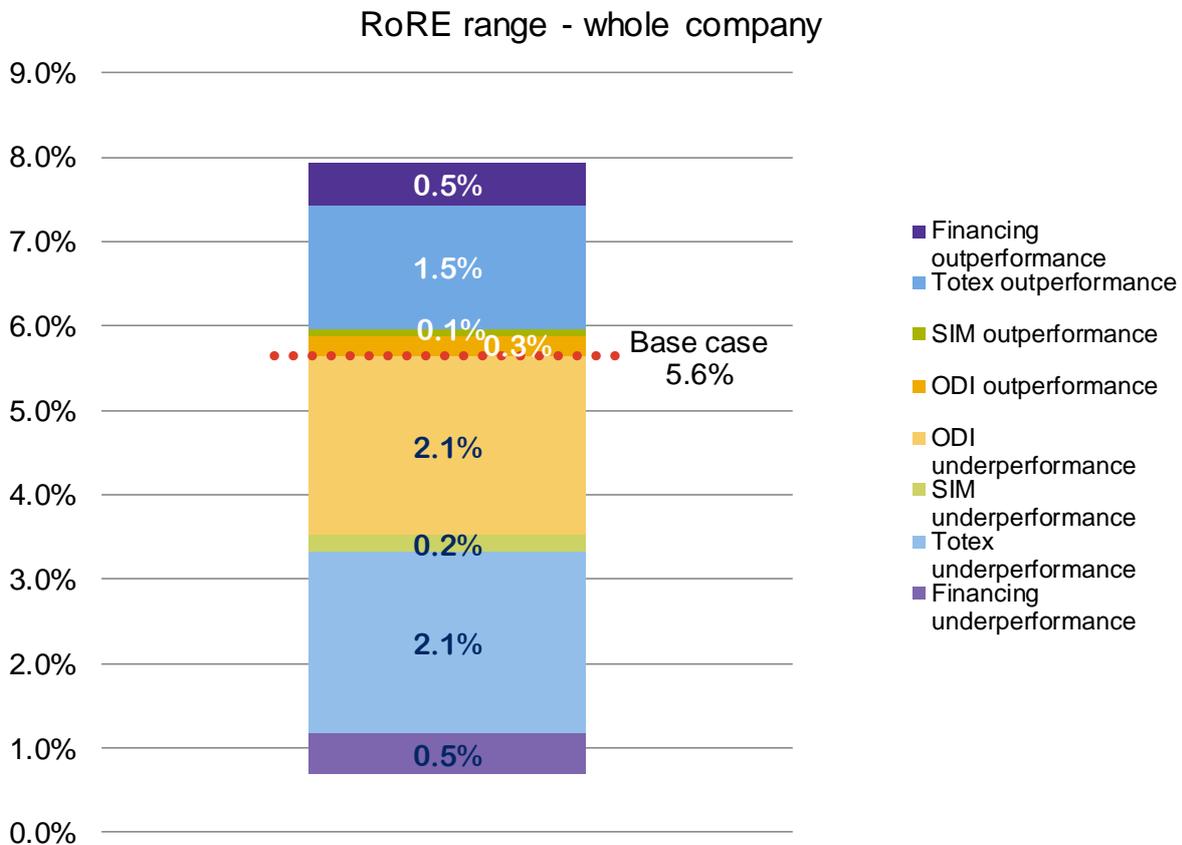
We have adjusted Southern Water’s draft determination ODI risk range, which was -2.0% to +0.4%, to take account of our interventions discussed in annex 4. Its final range is -2.1% to +0.3%. This takes into account the cap on ODI rewards and penalties. Without the cap, the ODI range would be -2.4% to +0.3%. -0.1% to +0% of this range is associated with delivery incentives for special cost claims which are not covered by the cap.

Southern Water did not provide any additional evidence on its financing risk. The company has modelled this risk based on past variation in the risk free rate and the spread paid by investment-grade corporate borrowers, applying a Monte Carlo methodology. This approach resulted in a financing risk range of ±0.5%, which is consistent with other companies.

Southern Water also did not change its view of its SIM risk. It has assumed a relatively low degree of risk in this area, which is appropriate given that Southern Water considers it is likely to continue to rank below average in the SIM tables.

The composition of the RoRE range for Southern Water at an appointee level is shown in figure A6.1 below.

Figure A6.1 Southern Water’s RoRE range – appointee



Source: Ofwat calculations based on information from Southern Water.

Note: Numbers presented based on calibration of the ODIs against an assumed menu choice of a 50% sharing factor

A6.5 Financeability

Ofwat has a statutory duty to secure that a company is able to finance the proper carrying out of its functions. We interpret this financing duty as requiring that we ensure that an efficient company with a notional capital structure is able to finance its functions. A company’s actual capital structure is a choice for the company and it bears the risk associated with its choices. An efficient company is assumed to be able to deliver its plans based on the expenditure allowance in our final determination.

We set out our approach to assessing financeability in policy chapter A8. Consistent with our PR14 methodology, we have asked companies to provide board assurance on their financeability and to set out their target credit ratings and financial ratios for the notional company. As part of our assessment, we consider the evidence of

financeability provided by companies and model their business plan and our draft and final determination financial ratios

Table A6.6 Representations specific to Southern Water’s financeability

| Respondent | Summary of comment | Ofwat response |
|----------------|---|---|
| Southern Water | <p>The company states that the revenues in the draft determination plan revenues are less than in its June submission update, at the Appointee level.</p> <p>The company considers that any unmitigated reduction in revenues weakens its funds from operations, a key measure in assessing financeability.</p> | <p>The revenues in the draft determination reflect our view of efficient costs.</p> <p>Consistent with our methodology and the approach we have used previously, we assess financeability on a notional basis for an efficient company and customers should not bear the costs of inefficiency.</p> |
| Southern Water | <p>The draft determination interventions including the serviceability shortfall and wholesale and retail cost challenges make the plan unfinanceable on a notional basis</p> | <p>Financeability should be assessed pre-legacy adjustments based on an efficient notional company that is, Ofwat’s view of allowed totex and ACTS, consistent with the established approach that we and the Competition Commission have used previously. It is for companies to manage any impact arising from inefficient costs or legacy adjustments. We consider the final determination is financeable as set out in table A6.7.</p> |
| Southern Water | <p>The retail control is not financeable on a standalone basis due to Ofwat’s interventions on input price pressure, bad debt and base year expenditure.</p> | <p>Consistent with our approach elsewhere, our assessment of whether retail is self financing is assessed on the basis of an efficient operator. We have run our stand-alone retail financeability test and consider the retail control is financeable.</p> |

In table A6.7, we set out the notional financeability ratios associated with Southern Water’s business plan draft determination and final determination.

Table A6.7 Company and Ofwat financial ratio calculations based on the company business plan and financial ratios based on our final determination

| Financial ratios for notional company | Financial ratio calculations based on the company business plan (average 2015-20) | | Financial ratio calculations based on Ofwat calculations (average 2015-20) | |
|--|---|-------------------|--|---------------------|
| | Company calculation | Ofwat calculation | Draft determination | Final determination |
| Cash interest cover (ICR) | 3.43 | 3.35 | 3.41 | 3.44 |
| Adjusted cash interest cover ratio (ACICR) | 1.50 | 1.46 | 1.49 | 1.46 |
| Funds from operations(FFO)/debt | 11.42% | 11.09% | 11.34% | 11.08% |
| Retained cash flow/debt | 8.76% | 8.45% | 8.67% | 8.42% |
| Gearing | 61.43% | 62.63% | 61.88% | 62.02% |
| Dividend cover (profit after tax/dividends paid) | 0.71 | 0.63 | 0.56 | 0.53 |
| Regulatory equity/regulated earnings for the regulated company | 17.71 | 17.52 | 17.71 | 17.68 |
| RCV/EBITDA | 10.00 | 10.03 | 10.00 | 10.24 |

Commentary:

The company has targeted a ratio of A3/A-. The company provided evidence of Board assurance that the company would be financeable under both its actual and a notional capital structure. The low dividend cover ratio reflects the company's decision to lower RCV run off towards industry average while it still has high depreciation rates on an IFRS basis (relative to rest of industry). In our draft determination, we considered that our notional ratios were consistent with the company's ratios and so we considered that the draft determination was financeable.

PAYG rate: In its representation on its draft determination Southern Water proposed an increase to its PAYG rate so that for every £1 million decrease in appointee revenues against its June plan there is a 0.01% increase in its PAYG rates. The company states that based on our interventions it does not consider the draft determination to be financeable on

| Financial ratios for notional company | Financial ratio calculations based on the company business plan (average 2015-20) | | Financial ratio calculations based on Ofwat calculations (average 2015-20) | |
|---|---|-------------------|--|---------------------|
| | Company calculation | Ofwat calculation | Draft determination | Final determination |
| a notional basis. | | | | |
| For the final determination, we have not accepted the company's proposal on PAYG . We set out our assessment on the companies proposed changes to PAYG rates in table A6.8. | | | | |

As explained in policy chapter A8, companies have been allowed to use new tools in the form of PAYG rates (the proportion of totex recovered in the period 2015-20) and RCV run-off rates (depreciation of the RCV). Both PAYG and RCV run-off rates can be adjusted to change the proportion of costs recovered within the 2015-20 period and the amount added to the RCV and recovered over a longer period.

Table A6.8 Assessment of changes to PAYG and RCV run off rates

| Area assessed | Commentary | Our final assessment |
|--------------------------|--|----------------------|
| Quality of engagement | Customer survey, however this was based on the profile of bills in the 2015-20 period and did not consider longer-term issues. | Partial pass |
| Basis of engagement | No engagement on benefits and costs of PAYG changes to support financeability. Southern Water has sought to address actual financeability issues (such as impact of totex, retail and legacy interventions) rather than notional financeability. | Fail |
| Proportionality | No adjustment is required to address notional financeability and therefore the scale of the proposed PAYG change is not justified. | Fail |
| Evidence of net benefits | No benefits analysis. It is not evident why the high level of target ratios proposed by Southern are beneficial to customers. | Fail |

| Area assessed | Commentary | Our final assessment |
|---------------|--|----------------------|
| Overall | We have not accepted Southern Water's proposal. Southern Water is using PAYG to address actual financeability issues such as legacy adjustments and the efficiency cost challenges and there is little to support the high level of its notional rating target (11% FFO/debt). | Fail |

Table A6.9 sets out the PAYG and RCV run-off rates, which shows whether revenue has been brought forward compared to the December plan and the impact that this has on RCV growth and longer-term affordability and financeability. As set out in Table 6.8, we have not accepted the company's proposed use of financeability levers and so the PAYG and RCV run-off rates are unchanged.

Table A6.9 Impact of changes in cost recovery rates on RCV growth

| | PAYG rate | RCV run-off | RCV growth (%) – 1 Apr 2015 to 31 Mar 2020 |
|-----------------------|-----------|-------------|--|
| Company December plan | 46.5% | 4.8% | 5.0% |
| Company June plan | 48.7% | 5.0% | 6.7% |
| Draft determination | 48.7% | 5.0% | 6.4% |
| Final determination | 48.7% | 5.0% | 5.6% |

A6.6 Affordability

We set out our approach to assessing affordability in policy chapter A8.

Table A6.10 sets out the change in household bill profile between the company's December and June business plans and the draft and final determinations. All bills are shown without the impact of inflation on the wholesale element of the bill and are indicative, as final bills will depend on the growth in the number of customers, changes in their usage and the specific charges that the company sets each year within the overall price controls that we have determined.

Table A6.10 Household bill profile

| | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
|---|------------|------------|------------|------------|------------|------------|
| Company December plan | 413 | 411 | 413 | 412 | 411 | 406 |
| Company June plan | 412 | 412 | 410 | 407 | 402 | 399 |
| Ofwat calculation for June plan | 413 | 406 | 406 | 404 | 400 | 397 |
| Ofwat calculation for draft determination – pre-reprofiling | 413 | 385 | 383 | 379 | 376 | 373 |
| Ofwat calculations for draft determination | 413 | 381 | 381 | 379 | 378 | 378 |
| Ofwat calculations for final determination | 413 | 388 | 387 | 385 | 383 | 383 |

Companies have not necessarily used the same method of calculating household bills as Ofwat – for example, we have included economies of scope for household retail when calculating combined water and sewerage bills. So the Ofwat calculations are not directly comparable to the company plans (lines 1 and 2 of table A6.10).

The final determination leads to a reduction in bills in 2015-20. We have reprofiled customer bills to provide a gradual decline, consistent with customer preferences in Southern Water’s research.

A6.6.1 Acceptability

The company conducted robust customer engagement to support its original December 2013 business plan submission. Its research tested a flat real term bill profile, with 90% of customers finding this acceptable.

Southern Water proposed an amended bill profile in its representation based on the findings of the new customer research it carried out in response to our draft determination feedback. The research took the form of an online survey asking respondents which of two possible bill profiles they would prefer – a gradually changing profile, or one featuring an initial sharp decrease. The findings indicated a strong preference for the smoothed profile. We have reprofiled bills to reflect this.

The bill profile in the final determination is lower than the company's December plan and so we consider that the final determination bill profile will remain acceptable to the majority of the company's customers.

Table A6.11 explains the comments that we received that are specific to acceptability and outlines how our interventions have been influenced by our consideration of these responses.

Table A6.11 Representations specific to Southern Water's acceptability

| Respondent | Summary of comment | Ofwat response |
|----------------------|--|---|
| CCWater ¹ | CCWater conducted research on the acceptability of the draft determination to customers. CCWater did not seek to produce comparable results to the company. The CCWater research suggests 55% of customers find the draft determination acceptable after they have been provided with information on bills, inflation and what the water company will deliver. | We note that the CCWater research was not intended to be comparable. It has produced a significant difference to the research that the company undertook on its revised business plan, which was that 90% found the plan acceptable. The company's plan has been developed with input from its CCG. The CCG's role was to help ensure the business plan reflected the views and priorities of customers. We have reviewed the company's acceptability research, which included reviewing the transparency and accuracy of the bill and inflation information. We consider that the acceptability that the company reported is sufficiently robust. We also consider that the CCWater survey results indicate the importance of continued engagement with customers. |

Note:

1. CCWater acceptability results sourced from final version of 'Customers' views on Ofwat's draft determinations for process and service 2015-20' October 2014.

A6.6.2 Identification of affordability issues and appropriate support measures

The company has a comprehensive range of affordability measures in place, and outlines in its business plan how it is proposing to both increase the coverage of these schemes and to add new initiatives. The key measures are summarised in table A6.12.

Table A6.12 Key affordability measures

| Measure | Current coverage (number of customers) | Forecast 2019-20 coverage |
|--------------------------------|--|---------------------------|
| WaterSure | 7,718 | 1,700 |
| Water direct | 9,870 | 13,200 |
| Flexible payment plans | 1,273,184 | 1,362,000 |
| Debt advice – in house | All WaterSure, Water Direct and New Start customers receive in-house advice. | |
| Debt advice – 3rd party | 19,168 | 23,000 |
| Trust fund/hardship fund | 4,843 | 7,400 |
| Write-off scheme (New Start) | 9,187 | 54,500 |
| Water efficiency advice/audits | 44,984 | 61,500 |
| Social Tariff | 117 | 61,800 |
| Conditional payment matching | 10 (pilot) | Subject to pilot |

A6.6.3 Longer-term affordability

During the risk-based review, although the company had engaged with customers on future affordability, we concluded that there appeared to be significant movements in the use of cost recovery tools (particularly PAYG) and that the impact of these movements on customers' bills had not been explained.

In its June submission the company quantified and clearly set out the impact of the different cost recovery tools that it had used and how these interacted with RCM adjustments that have a significant impact during the 2015-20 period. We concluded that longer-term affordability had not been compromised by the use of the cost recovery levers in the 2015-20 period.

In its representation to the draft determination, Southern Water proposed to increase PAYG to mitigate the £25m loss in revenue it calculated would result from our draft determination. We have not accepted this change. We set out our assessment the companies proposed changes to PAYG rates in table A6.8. We therefore continue to

consider that longer-term affordability has not been compromised by the use of cost recovery levers included in our final determination.

A6.6.4 Longer-term affordability – ODIs

The company's potential maximum ODI rewards will not have a negative impact on overall affordability in the longer term. The maximum reward available is less than the bill reduction now proposed. A flat real term bill profile was acceptable to 90% of customers. Therefore, we do not expect that the impact of ODI rewards will negatively impact customers' acceptability of the plan.

The company's CCG noted that it is pleased that the ODIs continue to be attached to those things that are important to customers and the company provides evidence of customer support for the concept of rewards for ODIs.

In its representation, the company proposes a wide range of amendments to improve the ODI package that we presented in the draft determination. We have considered these representations in developing our final ODI package. We consider that rewards should only be provided for genuinely stretching performance.

Annex 1 Wholesale costs

Establishing final determination thresholds

Our approach to establishing final determination thresholds is outlined in policy chapter A3.

In the tables below, we provide some information on the company-specific numbers that support these calculations.

Further information about our assessment of each claim is set out in the populated version of final determination cost threshold models.

Table AA1.1 Movement from basic cost threshold to final determination threshold for wholesale water totex (£ million)

| Basic cost threshold | Policy additions ¹ | Unmodelled costs adjustment | Deep dives | Final determination threshold | Deep dives fully or partially not added ² |
|----------------------|-------------------------------|-----------------------------|------------|-------------------------------|--|
| 695.8 | 74.8 | 0.0 | -1.6 | 769.0 | 63.8 |

Notes:

1. See Table AA1.2 below.
2. Deep dives are net of implicit allowances. A value of zero means deep dives are wholly covered by IAs.

Table AA1.2 Policy additions to the wholesale water basic cost threshold (£ million)

| Business rates | Pension deficit payments | Third party costs | Open market costs | Net v gross adjustments | Total |
|----------------|--------------------------|-------------------|-------------------|-------------------------|-------|
| 48.9 | 12.7 | 12.7 | 0.5 | 0.0 | 74.8 |

Table AA1.3 Comparison of company wholesale water totex with the final determination threshold and 2010-15 totex (£ million)

| Plan ¹ | Final determination threshold | Gap ² | 2010-15 v Plan |
|-------------------|-------------------------------|------------------|----------------|
| 816.1 | 769.0 | 47.1 | -54.9 |

Note:

1. Where the company's business plan total has been adjusted by the company as part of its representations on its draft determination, this is reflected here.
2. This gap will not equal the deep dives fully or partially not added in Table AA1.1 if the company's claims for special treatment in the costs thresholds are not equal to the gap.

Table AA1.4 Summary of wholesale water deep dive assessments (£ million)

| Company proposal | | Assessment | | | | Final determination allowance | |
|--|---------------|--------------------|--------------|-----------------------|--------------|-------------------------------|----------------|
| Claim | Amount sought | Implicit allowance | Need | Cost-benefit analysis | Robust costs | Assessment | Amount allowed |
| Deep dives | | | | | | | |
| Representation: energy costs | 4.7 | 0.0 | Fail | N/a | N/a | Fail | - |
| Representation: Woolman's Wood | 9.9 | 0.0 | Fail | N/a | N/a | Fail | - |
| Representation: water mains length – model input variable | 8.6 | 0.0 | Fail | N/a | N/a | Fail | - |
| Representation: removal of model WM3 | 25.0 | 0.0 | Fail | N/a | N/a | Fail | - |
| Representation: population growth adjustment | 5.9 | 0.0 | Fail | N/a | N/a | Fail | - |
| Ofwat adjustment: updating exogenous variables for FWRMP and required supply demand enhancements | 0.0 | 0.0 | Partial pass | N/a | N/a | Partial pass | 5.5 |
| Representation: planned interruptions - modelling claim | 9.7 | 0.0 | Fail | N/a | N/a | Fail | - |
| Representation: metering modelling claim | -6.6 | 0.0 | Pass | N/a | Partial pass | Partial pass | -7.1 |

Table AA1.5 Movement from basic cost threshold to final determination threshold for wholesale wastewater totex (£ million)

| Basic cost threshold | Policy additions ¹ | Unmodelled costs adjustment | Private sewage pumping stations | NEP5 | Update to private sewer model delta | Deep dive | Final determination threshold | Deep dives fully or partially not added |
|----------------------|-------------------------------|-----------------------------|---------------------------------|-------|-------------------------------------|-----------|-------------------------------|---|
| 1,521.7 | 105.9 | 0.0 | 20.3 | 128.6 | -4.0 | 117.1 | 1,889.7 | None |

Notes:

1. See Table AA1.6 below.
2. Deep dives are net of implicit allowances. A value of zero means deep dives are wholly covered by IAs.

Table AA1.6 Policy additions to the wholesale wastewater basic cost threshold (£ million)

| Business rates | Pension deficit payments | Third party costs | Open market costs | Net v gross adjustments | Total |
|----------------|--------------------------|-------------------|-------------------|-------------------------|-------|
| 76.8 | 27.7 | 0.0 | 1.4 | 0.0 | 105.9 |

Table AA1.7 Comparison of company wholesale wastewater totex with the final determination threshold and 2010-15 totex (£ million)

| Plan ¹ | Final determination threshold | Gap ² | 2010-15 v Plan |
|-------------------|-------------------------------|------------------|----------------|
| 1,928.7 | 1,889.7 | 39.0 | 2.5 |

Note:

1. Where the company's business plan total has been adjusted by the company as part of its representations on its draft determination, this is reflected here.
2. This gap will not equal the deep dives fully or partially not added in Table AA1.5 if the company's claims for special treatment in the costs thresholds are not equal to the gap.

Table AA1.8 Summary of wholesale wastewater deep dive assessments (£ million)

| Company proposal | | Assessment | | | | Final determination allowance | |
|--|---------------|--------------------|------|-----------------------|--------------|-------------------------------|----------------|
| Claim | Amount sought | Implicit allowance | Need | Cost-benefit analysis | Robust costs | Assessment | Amount allowed |
| Deep dive | | | | | | | |
| NEP5 including WFD | 138.2 | 9.5 | Pass | Pass | Pass | Pass | 128.6 |
| Representation: Bathing Water Enhancements | 33.4 | 18.1 | Pass | Pass | Pass | Pass | 15.2 |
| Representation: Woolston STW | 40.4 | 0.0 | Pass | Pass | Partial pass | Partial pass | 36.2 |
| Representation: Thanet Sewers Groundwater | 51.3 | 0.0 | Pass | Pass | Partial pass | Partial pass | 37.6 |
| Representation: Millbrook Sludge | 19.9 | 2.8 | Pass | Pass | Partial pass | Partial pass | 15.4 |
| Peacehaven –Exogenous variables | 17.6 | 0.0 | Pass | N/a | Partial pass | Partial pass | 12.8 |

Annex 2 Household retail

Details on our assessment of proposed adjustments to the ACTS

Our approach to setting the industry ACTS is outlined in policy chapter A5.

Below we provide information on our assessment of the company-specific adjustments to the ACTS.

Bad debt –summary

- In its revised business plan, Southern Water sought an adjustment for bad debt of £12.6m over 2015-20.
- We did not accept the company's proposal in the draft determination.
- Our position is unchanged at final determination.

Bad debt – our final assessment

In its revised business plan, Southern Water sought an ACTS adjustment for bad debt based on the level of deprivation and bill size faced by its customers. The total value of the adjustment was £12.6m.

We did not accept Southern Water's proposal for an ACTS adjustment for bad debt based on deprivation and bill size in the draft determination. When considered in the round and compared to other companies, Southern Water's evidence suggests some room for improvement in terms of management efficiency and also suggests that it is not affected in a materially different way compared to other companies when looking at both relative levels of bills and deprivation, rather than just bills alone. Therefore, we concluded that Southern Water's evidence does not support an adjustment for bad debt.

Southern Water made a representation on our assessment of the company's proposed bad debt adjustment. The company questioned whether the comparison made with other companies was valid. It suggested that its recent compulsory metering programme may have led to a justified difference in bad debt costs. Southern Water also provided some further evidence on management practices to support its claim.

Our position for final determination is unchanged. We have not accepted the proposed adjustment for the final determination. Although the company provided further evidence on its management practices, we do not consider that the company has demonstrated that input price pressure is beyond efficient management control. The company has also not demonstrated that it is affected in a materially different way to other companies. We invited the company to provide further evidence to support its view that the comparison with other companies was not valid, in particular around the level of metering. The company did not provide us with sufficiently convincing evidence that our relative assessment was not valid. We have therefore not accepted this adjustment. Our final review of the company's evidence against our assessment criteria is set out below.

Materiality

Southern Water's request is material at 3.8% of household retail operating expenditure plus depreciation over 2015-20.

Beyond efficient management control

Southern Water's modelling analysis and evidence is sufficient and convincing to demonstrate that doubtful debt costs are beyond management control. The company's representation included further evidence that practices are currently efficient.

Impacts the company in a materially different way

The company has the fifth highest bills in the industry which provides sufficient evidence to demonstrate that bills affect it in a materially different way to other companies. The modelling evidence that the company provides shows that in a counterfactual where it faced industry average levels of deprivation and bill size in its area instead of its actual level of deprivation and bill size, the company would face lower doubtful debt costs.

However, when comparing Southern Water to other companies we judge that the level of deprivation in Southern Water's area is not materially different to others. The company has below average levels of deprivation across all measures of deprivation and, although Southern Water has above average bills, its position can be compared against the following companies:

- Wessex Water, which has higher bills than Southern Water, and slightly lower deprivation and lower doubtful debts per customer but did not seek an adjustment for these costs;

- Anglian Water, which has slightly higher bills than Southern Water, and slightly lower doubtful debts per customer but slightly higher deprivation but did not seek an adjustment for these costs;
- South West Water, which has been allowed an adjustment for bad debt, but has considerably higher bills (the highest in the country) and higher levels of deprivation than Southern Water, and
- Dŵr Cymru, which has been allowed an adjustment for bad debt, but has higher bills (3rd highest), higher deprivation and higher levels of doubtful debt per customer.

We therefore conclude that Southern Water is not impacted in a materially different way to other companies and therefore we have not included this adjustment in the company's final determination.

The company also made a representation on an error made in the draft determination. The value of the disallowed bad debt adjustment should have been added on to base costs and hence included in the calculation of the ACTS and the company's allowed revenues but was excluded in error. We have corrected for this error in the final determination, and have added the costs associated with the adjustment back on to base retail costs.

Input price pressure – summary

- In its revised business plan, Southern Water sought an adjustment for input price pressure of £12.9m over 2015-20
- We did not accept the company's proposal in the draft determination
- Our position is unchanged at final determination

Input price pressure – our final assessment

In its revised business plan, Southern Water sought an ACTS adjustment for input price pressure. The adjustment was based on two elements – £4.5 million for input price pressure between 2013-14 and 2015-16 and £8.4 million for input price pressure in the period 2015 – 2020. We did not accept Southern Water's proposal for an ACTS adjustment for input price pressure in the draft determination. Southern Water did not show that input price pressure is outside of efficient management control or demonstrate that it is affected in a materially different way to other companies.

In its representation, the company provided further evidence to support the adjustment including evidence on its management practices.

Our position for final determination has not changed. We do not consider that the company has provided sufficient evidence to demonstrate that input price pressure is beyond efficient management control or that the company is affected in a materially different way to other companies. Our final review of the company's evidence against our assessment criteria is set out below.

Materiality

The company's proposed adjustment is material, at 4.0% of household retail operating expenditure plus depreciation over 2015-20.

Beyond efficient management control

Southern Water did not provide convincing evidence of efficient management practices as applied to retail costs. The company provided an analysis of its management practices for individual retail cost areas as part of its representation. However, in view of Southern Water's relative inefficiency, we consider that the company has only provided evidence that it has an approach to managing these costs, but has not demonstrated that it effectively implements best management practices. Therefore, we have concluded that Southern Water has not demonstrated that input price pressure is beyond efficient management control.

Impacts the company in a materially different way

The company provided unconvincing benchmarking evidence on relative efficiency compared to companies beyond the water sector. Also, our assessment for ACTS suggests that the company is not upper quartile efficient for unmetered retail costs (or for metered costs). Therefore the company has not demonstrated that it is affected in a materially different way to the other companies as the company has not demonstrated that it is demonstrably efficient relative to other companies in the industry and could not absorb further input price pressures through efficiency gains. We have therefore not accepted the adjustment.

Value of proposed adjustment

As Southern Water has failed to satisfy us that there is justification for an adjustment to be made, we have not assessed the justification for the value of the adjustment.

Table AA2.1 Household retail adjustments (£ million, nominal prices)

| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|--------------|--------------|--------------|--------------|--------------|---------------|
| Adjustments proposed in Southern Water's business plan | | | | | | |
| Bad and doubtful debt | 2.484 | 2.504 | 2.525 | 2.546 | 2.566 | 12.625 |
| Input price pressure (AMP5) | 0.883 | 0.912 | 0.907 | 0.911 | 0.909 | 4.522 |
| Input price pressure (AMP6) | 0.744 | 0.650 | 1.497 | 2.347 | 3.139 | 8.377 |
| Pension deficit repair costs | 0.783 | 0.763 | 0.744 | 0.725 | 0.707 | 3.722 |
| Adjustments included in business plan | 4.894 | 4.829 | 5.673 | 6.529 | 7.321 | 29.246 |
| Adjustments included in draft determination | | | | | | |
| Bad and doubtful debt | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Input price pressure (AMP5) | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Input price pressure (AMP6) | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Pension deficit repair costs | 0.777 | 0.777 | 0.777 | 0.777 | 0.777 | 3.884 |
| Adjustments included in draft determination | 0.777 | 0.777 | 0.777 | 0.777 | 0.777 | 3.884 |
| Adjustments proposed in Southern Water's representations | | | | | | |
| Doubtful debt | 2.484 | 2.504 | 2.525 | 2.546 | 2.566 | 12.625 |

| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|--|---------|---------|---------|---------|---------|--------|
| Input price pressure (AMP5) | 0.883 | 0.912 | 0.907 | 0.911 | 0.909 | 4.522 |
| Input price pressure (AMP6) | 0.744 | 0.650 | 1.497 | 2.347 | 3.139 | 8.377 |
| Pension deficit repair costs | 0.783 | 0.763 | 0.744 | 0.725 | 0.707 | 3.722 |
| Adjustments included in final determination | 4.894 | 4.829 | 5.673 | 6.529 | 7.321 | 29.246 |
| Adjustments included in final determination | | | | | | |
| Doubtful debt | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Input price pressure (AMP5) | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Input price pressure (AMP6) | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Pension deficit repair costs | 0.777 | 0.777 | 0.777 | 0.777 | 0.777 | 3.884 |
| Adjustments included in final determination | 0.777 | 0.777 | 0.777 | 0.777 | 0.777 | 3.884 |

Household retail revenue modification

We outline our approach to revenue modification in policy chapter A5.

Table AA2.2 sets out the amount per customer, by customer type, that allowed revenues will be modified by if outturn customer numbers differ from forecast customer numbers and Table AA2.3 sets out the baseline number of customers.

Table AA2.2 Household retail allowed revenue modification factors by class of customer (£/customer)

| Revenue modification per: | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
|---|---------|---------|---------|---------|---------|
| Unmetered water only customer | 26.94 | 26.34 | 24.44 | 22.48 | 23.02 |
| Unmetered wastewater only customer | 26.94 | 26.34 | 24.44 | 22.48 | 23.02 |
| Unmetered water and wastewater customer | 35.03 | 34.24 | 31.77 | 29.22 | 29.92 |
| Metered only water customer | 31.01 | 30.43 | 28.24 | 26.33 | 26.63 |
| Metered wastewater only customer | 32.01 | 31.08 | 28.89 | 26.63 | 27.17 |
| Metered water and wastewater customer | 39.29 | 38.50 | 35.71 | 33.20 | 33.64 |

Note: There will be no automatic indexation for retail price controls to RPI.

Table AA2.3 Assumed number of customers for household retail total revenues (000s)

| Number of customers | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
|--------------------------------|---------|---------|---------|---------|---------|
| Unmetered water only | 6.6 | 6.6 | 6.6 | 6.5 | 6.5 |
| Unmetered wastewater only | 347.1 | 312.1 | 277.1 | 242.2 | 207.2 |
| Unmetered water and wastewater | 72.5 | 72.2 | 71.8 | 71.4 | 71.1 |
| Metered water only | 70.6 | 71.2 | 71.8 | 72.5 | 73.0 |
| Metered wastewater only | 533.2 | 575.5 | 618.3 | 661.5 | 704.1 |
| Metered water and wastewater | 856.2 | 863.7 | 871.7 | 879.2 | 886.4 |

Annex 3 Reconciling 2010-15 performance

When we last set price controls at PR09, we included a number of incentive mechanisms designed to encourage companies to improve and deliver services more efficiently, and, to manage uncertainty. Consistent with the approach set out at the time of the final determinations in 2009 we have made adjustments at this price review (PR14) to 2015 to 2020 revenues to take account of company performance in the 2010 to 2015 period.

We set out our methodology for calculating the adjustments to 2015-20 wholesale price controls resulting from the company's actual performance during the 2010-15 period in policy chapter A4.

In this annex, we set out the final determination adjustments to 2015-20 price controls for Southern Water resulting from the company's actual performance during the 2010-15 period.

As part of the final determination of the 2010-15 adjustments, we have undertaken detailed calculations within our models for the RCM, OIA, CIS and serviceability shortfalls. While we provide an explanation of our interventions within this annex, each model contains the detail of the specific calculation.

We make a 'midnight adjustment' to the closing RCV from the previous period (ending on 31 March 2015) to obtain the opening RCV for the next period (starting on 1 April 2015). Our detailed calculations are contained within the RCV midnight adjustment model published alongside these final determinations.

In this annex, we provide an overview – comparing the company's view of the required revenue adjustments included in its revised business plan for each of the incentive tools for water and wastewater services, with our own view. We then consider each adjustment mechanism in turn.

However, we first consider the responses to our draft determinations that are specific to Southern Water's treatment in these areas below.

Consideration of representations on our draft determinations

In policy chapter A1, we provide a list of the non-confidential respondents to the draft determinations published in April, May and August of this year. We have fully considered all of the responses received, and where appropriate, we have made

either consequential adjustments to our industry-wide approach or company-specific interventions.

Where representations have addressed issues that are common to a number of companies, these comments, and any consequential changes to our approach, are discussed in policy chapter A4. Representations that are specific to reconciling 2010-15 performance for Southern Water, and any consequential impact on our final determination, are summarised in the table below.

Table AA3.1 Representations specific to reconciling 2010-15 performance for Southern Water

| Area | Respondent | Summary of comment | Ofwat response |
|-----------------|---|--|--|
| SIM | There were no representations in this area. | | |
| RCM | Southern Water | <p>Back-billing amounts</p> <p>The company has reviewed and updated its claim for back-billing and excluded claims for where there is clear evidence of company fault and where there is insufficient evidence to determine where the fault lay.</p> | <p>Southern has provided additional evidence to support the back-billing element of its RCM claim, which we previously disallowed in the draft determination. We have reconsidered this intervention, because the company has demonstrated that it has not claimed for back-billed amounts where the inaccuracy of the charging is the company's fault and has sought external assurance on this.</p> <p>We consider that the company has taken a reasonable, fair and appropriate approach for the back-billed amounts claimed.</p> |
| OIA | There were no representations in this area. | | |
| Change protocol | Southern Water | <p>Sewer flooding: 1 in 10 and 2 in 10 internal outputs</p> <p>Sewer flooding: 1 in 20 internal outputs</p> <p>The company provided detailed representations on sewer flooding. This included outperformance in some areas of the sewer flooding programme and also details of activity undertaken that was not a specified regulatory output (groundwater infiltration). We raised a query with the company</p> | <p>The company provided updated actuals and forecast information. It has also provided representations regarding a programme of work to reduce groundwater infiltration. This was not a specific output at FD09 but the company maintains that this complements the management of the sewer network by reducing the flows within the sewers. The company has provided clear information about the activities undertaken and the benefits the work will deliver. The company has also completed additional surface water</p> |

| Area | Respondent | Summary of comment | Ofwat response |
|----------------------------|----------------|--|---|
| | | in order to understand the drivers behind this activity, the scope and the costs. | management plans. We consider that the additional benefits bring the specific adjustments below the triviality threshold for logging down. |
| Service standard outputs | Southern Water | <p>The company provided evidence to confirm that in its representation that the service standards relating to the Exceptional items outputs (sewerage service) and Enhanced Service Level (odour from sewerage) outputs had been achieved.</p> <p>The company noted in its representation that it had accepted the shortfall for under delivery against the pollution service standard improvement.</p> | <p>Following our assessment of the information provided by the company as part of its representations, we are satisfied that the service standards in relation to Exceptional items outputs (sewerage service) and Enhanced Service Levels (odour from sewerage) have been achieved. There are no interventions in this area.</p> <p>With reference to the shortfall for under delivery on the number of pollution incidents, we maintain our view of a shortfall and therefore the shortfall applied at the draft determination remains.</p> |
| Serviceability performance | Southern Water | <p>Southern Water wrote a letter dated 13 November that stated without prejudice to its view that no serviceability adjustment is properly due it was prepared to accept in principle a self-imposed shortfall of £22.75 million providing the totality of the final determination was acceptable. It calculated this based on: a variation of our serviceability assessment taking into account proportionate adjustments; cross checked against its customer willingness to pay information; and cross checked against the scale of its asset health penalties over 2015 to 2020 set out in its June</p> | <p>We have conducted a full review of our methodology for calculating serviceability shortfalls in light of companies' representations. Details and the implications of this review can be found in policy chapter A4.</p> <p>Applying this methodology we have come to a different view of the appropriate value of a shortfall adjustment as set out in table AA3.16.</p> |

| Area | Respondent | Summary of comment | Ofwat response |
|----------------------------|----------------|---|---|
| | | business plan. | |
| Serviceability performance | Southern Water | Supply interruptions >12 hours: The Company made representations that no due account of exceptional events has been undertaken for the serviceability assessment. The company has provided further evidence related to a 2013-14 exceptional event affecting a large number of properties which it states should be excluded from our analysis. | We carefully considered the additional evidence provided by the company in relation to exclusions and consider that this is sufficient evidence to support that this event is outside direct management control and have therefore removed the shortfall applied at the draft determination Our detailed assessment of the company's specific representations, in relation to exclusions and mitigating circumstances, is set out in table AA3.16. |
| Serviceability performance | Southern Water | Flooding other causes: The Company has provided additional evidence that it considers shows that in 2012-13 and 2013-14 exceptional rainfall impacted the performance of this indicator. | We consider the evidence provided does not sufficiently demonstrate a link between rainfall and the flooding other causes event. We have therefore not applied exclusions in our assessment and so we have not changed our view on this indicator from at the draft determination. Our detailed assessment of the company's specific representations, in relation to exclusions and mitigating circumstances, is set out in table AA3.16. |
| Serviceability performance | Southern Water | Population equivalent (sewage treatment) non-compliance: Company provided representations that: 1) There have been material changes to the serviceability assessment and shortfall calculation methodologies. 2) The shortfall is disproportionate as a) it does | We have conducted a full review of our methodology for calculating serviceability shortfalls in light of companies' representations. Details and the implications of this review can be found in policy chapter A4. The approach to serviceability did change as part of FD09. We have carefully considered our approach to serviceability shortfalling and have amended our |

| Area | Respondent | Summary of comment | Ofwat response |
|------|------------|--|--|
| | | <p>not take account of the detriment to customers and the environment; b) this sub-service has a lower number of indicators compared to other sub-services c) the indicator is volatile to very small numbers of works failures d) the company's comparative performance levels on this indicator are four times tighter than industry average e) the shortfall is higher than Modern Equivalent Asset Value (MEAV) of the failed works.</p> <p>3) No account has been taken of new obligations on the company (change in the copper consent at Lidsey STW)</p> <p>The company provided further evidence related to what it considered to be exceptional events that should be excluded as a result of mitigating circumstances.</p> | <p>methodology for the assessment and calculation of serviceability shortfalls for the final determination. A full description and discussion of these issues is included in policy chapter A4.</p> <p>We have revised the overall level of shortfall for this indicator from £137.7 million to £51.6 million.</p> <p>It is important to note that the PR09 FD did not put forward serviceability shortfalls to take account of the detriment to customers or the environment, but to recover allowed capital costs from companies in the event that serviceability indicators are less than stable. FD09 explained that 50% of the capital maintenance would be used as the starting point for considering these calculations.</p> <p>The PR09 indicator levels were set in conjunction with the company based on its own information and we do not consider that a comparison with other companies is a relevant consideration in these circumstances. While we do not agree it is necessarily an important factor, the reduced shortfall is now lower than the MEAV of the failed works.</p> <p>Our assessment of the company's specific representations, in relation to exclusions and mitigating circumstances, is set out in table AA3.16.</p> <p>After the consideration of all other factors, the value of the</p> |

| Area | Respondent | Summary of comment | Ofwat response |
|-------------------------------|---|---|---|
| | | | shortfall that we have applied in the final determination is unaffected by the exclusion or inclusion of copper failures at Lidsey sewage treatment works. |
| Serviceability performance | Environment Agency | <p>Population equivalent (sewage treatment) non-compliance:</p> <p>The Environment Agency has contested Southern Water’s view on their failures due to copper at Lidsey sewage treatment works. The Agency states that the consent standards for Lidsey have been appropriately set to protect water quality downstream and are within the company’s control. It also does not expect the shortfall to prevent the company from meeting its regulatory requirements during AMP6.</p> | <p>It is helpful to understand the Environment Agency’s requirements. Due to the change in calculation method applied at final determination the value of the shortfall we have applied is unaffected by the exclusion or inclusion of copper failures at Lidsey sewage treatment works.</p> <p>As set out in annex 4, on a forward-looking basis customers and the environment will be protected by an ODI in this area.</p> |
| 2009 agreed overlap programme | There were no interventions in this area. | | |
| 2014-15 transition programme | There were no interventions in this area. | | |
| CIS | There were no representations in this area. | | As explained in policy chapter A4, we have corrected a minor error in the CIS model for all companies with respect to the discount rate used when calculating the future value of the revenue adjustment in the 2010-15 period. This |

| Area | Respondent | Summary of comment | Ofwat response |
|-------------------|------------|---|---|
| | | | minor change had no material impact of the final revenue adjustments. |
| Other adjustments | | There were no representations in this area. | |

Summary of 2010-15 adjustments

All companies were required to consider in its business plans its own adjustments for PR09 reconciliation.

Table AA3.2 below sets out for each of the incentive tools for water and wastewater services:

- the company's view of the required revenue adjustments included in its revised business plan; and
- our own view.

Our view reflects our understanding of the company's performance using these incentives, based on information provided in its revised business plan, subsequent query responses and representations on our draft determination. The table also shows other adjustments, such as those relating to tax resulting from the company's actual performance during the 2010-15 period.

Table AA3.1 notes the comments that we have received that are specific to this aspect of the wholesale water and wastewater controls of Southern Water and outlines how our interventions have been influenced by our consideration of these responses.

The main changes we have made in the final determination compared to our draft determination, are a revised serviceability shortfall for population equivalent (sewage treatment) non-compliance and the removal of the serviceability shortfall for unplanned interruptions to supply and removal of logging down adjustments for sewer flooding outputs. We have also made changes in the RCM model reflecting the company's additional evidence on back-billing.

Table AA3.2 Revenue adjustments 2015-20 (£ million)

| | Water service | | Wastewater service | |
|------------------------------------|---------------|------------|--------------------|------------|
| | Company view | Ofwat view | Company view | Ofwat view |
| SIM | -4.534 | -6.347 | -14.052 | -19.673 |
| RCM | 74.084 | 79.833 | 119.355 | 116.960 |
| OIA – post-tax | 17.442 | 17.442 | 24.655 | 26.494 |
| CIS | -14.271 | -13.870 | -28.809 | -30.511 |
| Tax refinancing benefit clawback | 0.000 | 0.000 | 0.000 | 0.000 |
| Other tax adjustments | 0.000 | 0.000 | 0.000 | 0.000 |
| Equity injection clawback | 0.000 | 0.000 | 0.000 | 0.000 |
| Other adjustments | 0.000 | -5.568 | 0.000 | 0.000 |
| Total wholesale legacy adjustments | 72.721 | 71.489 | 101.148 | 93.270 |

Notes: For the CIS mechanism, there is a corresponding adjustment to the RCV made at 1 April 2015 (part of the 'midnight' adjustments). The impact on the RCV for both water and wastewater can be seen in Table AA3.18. This adjustment is net of any logging up, logging down or shortfalls. A full reconciliation showing all of the midnight adjustments to the RCV, including the impact of logging up, logging down and shortfalls can be seen in Table A2.7 and Table A3.7. Totals may not add up due to rounding.

Adjustments by 2010-15 incentive mechanism

SIM

We provide our view of each company's SIM reward/penalty in policy chapter A4.

Tables AA3.3 provides the company's view and our view of the annualised rewards or penalties from the company's SIM performance. These are unchanged from the draft determination.

Table AA3.3 SIM annualised rewards (£ million)

| | | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|------------|--------------|---------|---------|---------|---------|---------|---------|
| Water | Company view | -0.907 | -0.907 | -0.907 | -0.907 | -0.907 | -4.534 |
| | Ofwat view | -1.269 | -1.269 | -1.269 | -1.269 | -1.269 | -6.347 |
| Wastewater | Company view | -2.810 | -2.810 | -2.810 | -2.810 | -2.810 | -14.052 |
| | Ofwat view | -3.935 | -3.935 | -3.935 | -3.935 | -3.935 | -19.673 |

Table AA3.4 Interventions on proposed 2010-15 SIM adjustments

| Area of intervention | What we did | Why we did it |
|----------------------|--|--|
| SIM penalty | This final determination includes our view of the company's SIM penalty, which we have calculated as -0.7%. This is the same as the draft determination. The company's resubmitted plan also estimated a penalty of -0.7%, but suggested a reduction for improved performance in the third year. | <p>We have arrived at this by application of our final methodology, which compares the company's actual SIM performance in 2011-12, 2012-13 and 2013-14, to the industry three-year average performance during 2011-14. The 2013-14 information was not available at the time companies submitted their business plans.</p> <p>We have not accepted the company proposal for a reduction in the SIM penalty for improved performance in the third year. This proposal is not in line with the methodology for the SIM.</p> |

RCM

At PR09, we set out the RCM in case companies over- or under-recover revenue relative to the assumptions that we made. The mechanism set out how any difference would be adjusted at PR14. This also provided a financial incentive for companies to encourage consumers to use water wisely.

The forecasts of demand for the period 2010 to 2015 that Southern Water set out at PR09 have proved to be inaccurate. This has led to Southern Water recovering far less revenue than we had assumed in 2009. Consistent with the rules we introduced at PR09 we have applied the RCM, which has significantly increased the wholesale revenue we have allowed between 2015 and 2020.

We have now introduced the wholesale revenue forecasting incentive mechanism (WRFIM) to mitigate the risks to customers beyond 2020 of such large transfers of revenue occurring again between different price control periods. It will also incentivise companies to forecast wholesale revenues more accurately to improve the quality of information available to stakeholders in the sector. Further details are set out in section A7.5 of policy chapter A7.

This final determination includes our view of the company's RCM annualised adjustment amounts as detailed in Table AA3.5 below. Table AA3.5a summarises our interventions in relation to Southern Water's proposed 2010-15 RCM adjustments.

We had concerns at the draft determination as to whether the back-billing amounts being claimed by the company were compliant with [RAG4.04](#) and [IN11/04: 'Simplifying the revenue correction mechanism'](#). Southern Water has provided additional evidence to support the back-billing element of its RCM claim, which we disallowed in the draft determination.

The company has updated its back-billing claim and excluded claims for where there are cases of company fault or where there is insufficient evidence to determine fault. We consider that the company has demonstrated in its DD representation that it has not claimed for back-billed amounts where the inaccuracy of the charging is the company's fault and it has taken a reasonable, fair and appropriate approach for the back-billed amounts claimed. We have accepted the company's back-billing claim and have included this within price limits.

For the RCM, we apply the vanilla wholesale WACC (real; pre-tax cost of debt, post-tax cost of equity) as the PR14 discount rate. For the final determination, we have applied a discount rate of 3.6%. This has also contributed to a small movement in the RCM from the draft determination.

Table AA3.5 RCM annualised adjustments for 2015-20 (£ million)

| | | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|------------|--------------|---------|---------|---------|---------|---------|---------|
| Water | Company view | 14.817 | 14.817 | 14.817 | 14.817 | 14.817 | 74.084 |
| | Ofwat view | 15.967 | 15.967 | 15.967 | 15.967 | 15.967 | 79.833 |
| Wastewater | Company view | 23.871 | 23.871 | 23.871 | 23.871 | 23.871 | 119.355 |
| | Ofwat view | 23.392 | 23.392 | 23.392 | 23.392 | 23.392 | 116.960 |

Southern Water has proposed to return £5m to customers through the RCM as a result of not delivering its leakage target in 2010-11. It included an adjustment of £5 million in its RCM calculations to reduce its calculated RCM by £5.6 million to £74.1 million for water.

Our assumptions at the draft determination included the company's proposed reduction as an 'other adjustment' and adjusted the company's view of its RCM upwards to £79.7 million for water. This compares with our view of £79.8 million for water. Our assumptions for the final determination agree with Southern Water's decision to reduce the RCM for the period 2015-20 as a result of a failure to meet its leakage target and so we have included an 'other adjustment' of -£5.6 million for water (see Table AA3.20).

Table AA3.5a RCM annualised adjustments for 2015-20 (£ million) – Adjusted company view

| | | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|-------|-----------------------|---------|---------|---------|---------|---------|--------|
| Water | Company view | 14.817 | 14.817 | 14.817 | 14.817 | 14.817 | 74.084 |
| | Other adjustments | 1.114 | 1.114 | 1.114 | 1.114 | 1.114 | 5.568 |
| | Adjusted company view | 15.931 | 15.931 | 15.931 | 15.931 | 15.931 | 79.653 |

We had concerns at the risk-based review with the company's 2013-14 and 2014-15 revenues forecasts because the company had projected a widening revenue shortfall that was not explained. We are no longer concerned because the company has updated its 2013-14 data with actuals and updated its 2014-15 forecasts in its June submission and has provided additional evidence to support its 2014-15 revenues forecast. We have not intervened on its 2014-15 revenues forecast.

Table AA3.6 Interventions on proposed 2010-15 RCM adjustments

| Area of intervention | What we did | Why we did it |
|--|--|---|
| FD09 assumptions – Measured Non-household's revenue for the Measured Non-household group immediately above and below the 50 megalitre (Ml) threshold | <p>Our assumptions include our view of the FD09 assumptions.</p> <p>Our view of the company's revenue assumptions for the measured non-household group immediately below and above the 50 Ml tariff basket threshold originate from the company's FD09 revenue forecasts that come from the tariff basket model, which we used for PR09.</p> | <p>There are small differences between the company's and our view of the FD09 assumptions used in the company's populated RCM model. The company applied different assumptions for 'FD09 Measured Non-household's revenue for the Measured Non-household group immediately above and below the 50ML threshold' compared with our view of its FD09 assumptions.</p> <p>Our assumptions for the final determination include the FD09 revenue forecasts as contained in the PR09 tariff basket model in accordance with our published methodology 'Setting price controls for 2015-20 – further information on reconciling 2010-15 performance'.</p> |
| Back-billing amounts | <p>Our assumptions for the final determination includes the updated back billed amounts claimed by the company.</p> | <p>We did not receive sufficient evidence at the draft determination that the back-billing amounts being claimed by the company were compliant with RAG4.04 and IN11/04. We have reviewed our DD intervention on this area based on the additional information submitted by Southern in its DD</p> |

| Area of intervention | What we did | Why we did it |
|----------------------|-------------|---|
| | | representation. The company has updated its back-billing claim and excluded claims for cases: where the company was at fault; and where there is insufficient evidence to determine fault. It has provided us with external assurance on the cases it has claimed for. We consider that the company has demonstrated in its DD representation that it has not claimed for back-billed amounts where the inaccuracy of the charging is the company's fault and it has taken a reasonable, fair and appropriate approach for the back billed amounts claimed. |

OIA

Table AA3.7 below summarises the company's view and our view of the incentive allowances for 2015-20. Table AA3.8 summarises our interventions in relation to Southern Water's proposed 2010-15 OIA adjustments.

There are no changes from our draft determination.

Table AA3.7 OIAs for 2015-20 (£ million)

| | | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|--------------------------------|--------------|---------|---------|---------|---------|---------|--------|
| Water service | | | | | | | |
| Incentive allowance (post-tax) | Company view | 7.858 | 7.858 | 1.463 | 0.262 | 0.000 | 17.442 |
| | Ofwat view | 7.858 | 7.858 | 1.463 | 0.262 | 0.000 | 17.442 |
| Wastewater service | | | | | | | |
| Incentive allowance (post-tax) | Company view | 6.164 | 6.164 | 6.164 | 6.164 | 0.000 | 24.655 |
| | Ofwat view | 6.623 | 6.623 | 6.623 | 6.623 | 0.000 | 26.494 |

Table AA3.8 Interventions on proposed 2010-15 OIA adjustments

| Area of intervention | What we did | Why we did it |
|--------------------------------|---|--|
| Private sewers logging up opex | We capped the company's high capex/opex ratio at one standard deviation above the industry average. This resulted in a larger proportion of opex feeding through into the opex incentive calculation as a logging up adjustment to FD09 expectations. | For consistency with the methodology we have applied to all companies where appropriate, which ensures companies do not benefit in (capex terms) from disproportionately high set-up costs incurred. |

Change protocol (logging up, logging down and shortfalls)

Table AA3.9 and Table AA3.10 below summarise Southern Water's view and our baseline view of total adjustments to:

- capex included in the CIS reconciliation; and
- the FD09 opex assumptions used in the calculation of the opex incentive revenue allowances.

The changes we have made in the final determination compared to our draft determination are the removal of the two logging down adjustments for sewer flooding outputs.

Table AA3.11 summarises our interventions in relation to Southern Water's proposed change protocol adjustments.

Table AA3.9 Summary of post-efficiency capex for logging up, logging down and shortfalls included in the CIS reconciliation (£ million)

| 2009-10 to 2014-15 – post-efficiency capex | Water service | | Wastewater service | | Total service | |
|--|-----------------|---------------|-----------------------|---------------|-----------------|---------------|
| | Company view | Ofwat view | Company view | Ofwat view | Company view | Ofwat view |
| Logging up (two-sided) | 0.000 | 0.000 | 24.352 | 20.956 | 24.352 | 20.956 |

| 2009-10 to 2014-15 – post-efficiency capex | Water service | | Wastewater service | | Total service | |
|--|-----------------|---------------|-----------------------|---------------|-----------------|---------------|
| | Company view | Ofwat view | Company view | Ofwat view | Company view | Ofwat view |
| Logging down (two-sided) | -53.450 | -53.449 | -22.096 | -22.096 | -75.547 | -75.545 |
| Shortfalls (one-sided) | 0.000 | 0.000 | 0.000 | -5.585 | 0.000 | -5.585 |

Note:

We exclude shortfalls for serviceability from the CIS reconciliation, but instead make direct adjustments to the RCV in 2015-16. We do this to allow the actual capex the company incurred in seeking to maintain serviceability, to be reflected in the rewards or penalties earned through the scheme. But to also ensure customers are not required to pay for the regulatory output the company has failed to deliver.

Table AA3.10 Summary of post-efficiency opex for logging up, logging down and shortfalls included in the OIA calculation (£ million)

| 2009-10 to 2014-15 – post-efficiency opex | Water service | | Wastewater service | | Total service | |
|--|-----------------|---------------|-----------------------|---------------|-----------------|---------------|
| | Company view | Ofwat view | Company view | Ofwat view | Company view | Ofwat view |
| Logging up | 0.000 | 0.000 | 3.950 | 7.570 | 3.950 | 7.570 |
| Logging down | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Shortfalls | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Shortfalls for serviceability | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

Table AA3.11 Interventions on proposed 2010-15 change protocol adjustments

| Area of intervention | What we did | Why we did it |
|---|--|---|
| Private sewer transfer – Logging up (sewerage service) | We have applied a challenge to the capex proposed and assessed it as £11.3 million. In post efficiency terms, this value is £10.0 million. We have assessed the proposed opex and increased the value from £4.2 million proposed by the company to £8.1 million. In post efficiency terms, our | We challenged the company's private sewers claim at the risk-based review because the capex/opex ratio was very high compared with the rest of the industry. The company has not provided any additional evidence in response to our challenge at the risk-based review. The revised business plan submitted in June has resulted in higher capex and therefore an even higher capex/opex ratio. A transfer |

| Area of intervention | What we did | Why we did it |
|--|---|--|
| | <p>assessment of the opex is £7.6 million.</p> | <p>of 25% of capex to opex effectively caps the ratio at one standard deviation above the industry average and ensures that the company does not benefit from the high set-up costs it has incurred.</p> |
| <p>Sewer flooding: 1 in 10 and 2 in 10 internal outputs – logging down</p> | <p>Following the representations and query response provided by the company we have concluded that the variance to FD09 is below the triviality threshold. We have therefore removed this intervention and will not be making any further adjustments.</p> <p>For the final determination, we have therefore removed the logging down adjustment of £10.3 million applied at the draft determination.</p> | <p>The company has provided updated actuals and forecast information. It has also provided representations regarding a programme of work to reduce groundwater infiltration. This was not a specific output at FD09 but the company maintains that this compliments the management of the sewer network by reducing the flows within the sewers. The company has provided clear information about the activities undertaken and the benefits the work will deliver. The company has also completed additional surface water management plans. We consider that the additional benefits bring the adjustment below the triviality threshold for logging down.</p> |
| <p>Sewer flooding: 1 in 20 internal outputs – logging down</p> | <p>Following the representations and query response provided by the company we have concluded that the variance to FD09 is below the triviality threshold. We have therefore removed this intervention and will not be making any further adjustments.</p> <p>For the final determination, we have therefore removed the logging down adjustment of £3.7 million applied at the draft determination.</p> | <p>The company has provided updated actuals and forecast information. It has also provided representations regarding a programme of work to reduce groundwater infiltration. This was not a specific output at FD09 but the company maintains that this compliments the management of the sewer network by reducing the flows within the sewers. The company has provided clear information about the activities undertaken and the benefits the work will deliver. The company has also completed additional surface water management plans. We consider that the additional benefits bring the adjustment below the triviality threshold for logging down.</p> |

| Area of intervention | What we did | Why we did it |
|--|--|--|
| Enhanced service levels: pollution Incidents – shortfall | The company did not propose an adjustment in relation to its under-delivery of the service standards associated with enhanced service levels – pollution incidents. We have assessed the outturn and forecast information provided by the company and determined that a shortfall of £6.3 million should be applied. In post efficiency terms, this value is £5.6 million (capex). | In FD09, the enhanced service level programme for pollution incidents was assigned both activity outputs and service standards outputs. We set out in FD09 that the service standard was the primary output. The company has not achieved the service standard required for both Cat 1 and 2s and Cat 3s. Since the allocated FD09 expenditure has not delivered the benefit to customers stipulated we have applied a shortfall adjustment for the full FD09 allowance. |

We have not intervened for the following claims:

- Testwood water supply (Logging down – water service)
- Woolston STW – unfunded NEP obligation (Logging up – sewerage service)
- Sludge Capacity Enhancement: Millbrook (Logging down – sewerage service).

Service standard outputs

Service standards are regulatory outputs that we set in the 2009 final determination supplementary reports⁴. Where companies have not reported progress on these service standards before submitting business plans, we would have expected them to do so within the price review process.

Following our assessment of the information provided by the company as part of its representations, we are satisfied that the service standards in relation to exceptional items outputs (sewerage service) and enhanced service levels (odour from sewerage) have been achieved. There are no interventions in this area.

⁴ In the final determination supplementary reports we said: “Both the project activity (as proposed in your final business plan) and the service standard are the defined output. You must demonstrate delivery of the stated service standard output through the June return. We recognise that companies may decide to prioritise activity differently in order to achieve the service output in a more efficient manner. All material changes to the project activity must be reported and explained through your June return.”

With reference to the shortfall for under delivery on the number of pollution incidents, we maintain our view of a shortfall and therefore the shortfall applied at the draft determination remains.

Serviceability performance

Table AA3.12 below summarises our serviceability assessments for Southern Water and table AA3.13 quantifies the value and impact of any serviceability shortfall on the RCV. The changes we have made in the final determination compared to our draft determination, are the removal of shortfall for unplanned interruptions to supply and due to changes in our serviceability shortfall methodology set out in policy chapter A4. Table AA3.14 summarises our interventions in relation to Southern Water's proposed adjustments for serviceability.

Table AA3.12 Serviceability assessments for 2010-15¹

| | | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 |
|-------------------------------|-------------------------|----------|---------------|---------------|---------------|---------------|
| Water infrastructure | Company view | Stable | Stable | Stable | Stable | Stable |
| | Ofwat view | Stable | Stable | Marginal | Stable | Stable |
| Water non-infrastructure | Company view | Stable | Stable | Stable | Stable | Stable |
| | Ofwat view | Stable | Stable | Stable | Stable | Stable |
| Wastewater infrastructure | Company view | Marginal | Stable | Stable | Stable | Stable |
| | Ofwat view ² | Marginal | Deteriorating | Deteriorating | Deteriorating | Deteriorating |
| Wastewater non-infrastructure | Company view | Stable | Stable | Marginal | Stable | Stable |
| | Ofwat view ² | Stable | Deteriorating | Deteriorating | Deteriorating | Deteriorating |

Notes:

- Assessments are based on actual and forecast performance submitted in the company's revised business plan. Assessments for 2014-15 are based on forecast data and are subject to review once actual performance data becomes available.
- Our assessment of deteriorating performance is explained in table AA3.14.

Table AA3.13 Impact of serviceability shortfalls on the RCV (£ million)

| 2009-10 to 2014-15 | | Water | Wastewater | Total |
|----------------------------|--------------|-------|------------------|-------|
| Amount subtracted from RCV | Company view | 0.0 | 0.0 ¹ | 0.0 |
| | Ofwat view | 0.0 | 54.9 | 54.9 |

Notes: 1. The company has stated it would accept a shortfall of £22.75m.

Table AA3.14 Interventions on proposed 2010-15 serviceability adjustments

| Area of intervention | What we did | Why we did it |
|---|---|--|
| Unplanned interruption to supply exceeding 12 hours | For the purposes of the final determination, we have removed the shortfall of £12.1 million applied at the draft determination for this indicator. This is based on additional information supplied by the company, which enabled events to be excluded from the assessment as they were outside management control. | The company has had three breaches of the upper control limit in 2010-11, 2012-13 and 2013-14. The company forecast for the performance of this indicator in 2014-15 is at the reference level. In its representation, the company provided additional evidence related to interruption events. Based on this evidence we have excluded a severe weather related incident that occurred in 2013 in the Isle of Wight affecting over 1,500 properties. The company was able to demonstrate that all four lines of resilience in the area affected failed. We are satisfied by this evidence from the company and have accepted that the incident should be excluded. After removing this incident, the performance in 2013-14 is below the upper control limit. On this basis, we have removed the shortfall applied at the draft determination for this indicator. |
| Properties internally flooded in year because of other causes | For the purposes of the draft determination, we have assumed a shortfall adjustment of £3.3 million (post efficiency) for deteriorating performance in this indicator. In accordance with our shortfall calculation methodology as applied to all companies the shortfall (which has been applied for the years 2012-13, 2013-14 and 2014-15) has not been capped; the scaling factor | The company has had three breaches of the upper control limit in 2010-11, 2012-13 and 2013-14. Performance in the remaining year (2011-12) was also close to the upper control limit. The company has forecast 2014-15 performance to outturn close to the reference level. The company provided analysis showing how the 2014-15 predicted performance was calculated. We consider that the extrapolation used does not reflect historical performance for the remaining months of the year. To protect customers we have not applied an assumption around improving performance particularly as we are only part way through 2014-15. If the company does deliver an improved performance, we would take this into account |

| Area of intervention | What we did | Why we did it |
|--|---|---|
| | <p>for these years is below 1 standard deviation. The overall scale of the shortfall does not exceed 50% of the sub-service capital expenditure and therefore no further cap has been applied.</p> | <p>when considering the serviceability reconciliation in 2015.</p> <p>The company also has provided additional evidence that it considers demonstrates that some events should be excluded due to extreme weather. However, we consider that the rainfall analysis presented does not appear to have a direct correlation between the extreme weather events and the number of properties flooded (as the statistical correlation is not significant).</p> <p>The information provided by the company on sewerage system inundation also did not demonstrate the link between high levels of groundwater and the flooding experienced. We have therefore not accepted the exclusions proposed by the company.</p> |
| <p>Flooding overloaded sewers excluding severe weather</p> | <p>For the purposes of the final determination, there is no intervention for this indicator. This is conditional upon the performance in 2014-15 being improved to a position such that it is considered stable. We will consider a shortfall adjustment if this is not achieved. Serviceability performance in AMP5 is due to be reviewed in 2015 once data is available for the whole of AMP5 period.</p> | <p>The company has had one breach of the upper control limit in 2013-14. The company has forecast 2014-15 to outturn at the reference level. We require the company to demonstrate stable serviceability in 2014-15, if this is not achieved we will consider a shortfall adjustment.</p> |
| <p>Pollution incidents (Cat 1,2 and 3)</p> | <p>For the purposes of the final determination, there is no</p> | <p>The company has had two breaches of the upper control limit in 2010-11 and 2011-12. Performance for this indicator has improved</p> |

| Area of intervention | What we did | Why we did it |
|--|---|--|
| | <p>intervention for this indicator. This is conditional upon the performance in 2014-15 being improved to a position such that it is considered stable. We will consider a shortfall adjustment if this is not achieved. Serviceability performance in AMP5 is due to be reviewed in 2015 once data is available for the whole of AMP5 period.</p> | <p>in the last two years but it has remained above the reference level. The company has forecast 2014-15 performance to outturn at the reference level. We require the company to demonstrate stable serviceability in 2015; if this is not achieved we will consider a shortfall adjustment.</p> |
| <p>Sewage treatment works numeric non-compliance</p> | <p>For the purposes of the final determination, there is no intervention for this indicator. This is conditional upon the performance in 2014-15 being improved to a position such that it is considered stable. We will consider a shortfall adjustment if this is not achieved. Serviceability performance in AMP5 is due to be reviewed in 2015 once data is available for the whole of AMP5 period.</p> | <p>After taking into account company exclusions relating to iron non-compliance, where the Environment Agency had granted new consents for STW numeric compliance, the company has had breaches of the upper control limit in 2011-12 and 2012-13 and performance was also above the reference level for 2013-14. Additional evidence provided by the company showing actual performance up to September 2014 demonstrates that there has only been one failure this calendar year, therefore we accept that performance in 2014-15 is likely to outturn at or below the reference level. However, the company is required to confirm this improved performance in 2015. If this is not achieved, we could apply a shortfall as part of the 2015 review.</p> |
| <p>Population equivalent (sewage treatment) non-compliance</p> | <p>For the purposes of the final determination, we have assumed a shortfall for deteriorating</p> | <p>The company has had breaches of the upper control limit in all four years from 2010-11 to 2013-14. We have reviewed the company's evidence in its representation and have accepted some additional</p> |

| Area of intervention | What we did | Why we did it |
|----------------------|--|--|
| | <p>performance in this indicator. In accordance with our shortfall calculation methodology the shortfall applied for the years 2011-12, 2012-13 and 2013-14 has been capped at 1 standard deviation. We have also applied a multiplication factor of 0.75 to the final shortfall value to mitigate the impact of the volatile nature of this indicator. The value of the assumed shortfall adjustment is £51.6 million (post efficiency). The overall scale of the shortfall does not exceed 50% of the sub-service capital expenditure and therefore no further cap has been applied.</p> | <p>exclusions from our position at the draft determination. Further detail regarding the exclusions we have applied is provided below.</p> <p>Coldwaltham (2011-12): We have accepted the company's position that this failure was included in error by the company. We have therefore excluded this from our assessment.</p> <p>Cuckfield (2013-14): We have accepted the company's position that this failure was included in error by the company. We have therefore excluded this from our assessment.</p> <p>Westfield (2013-14): We have accepted the company's position that this failure was included in error by the company. We have therefore excluded this from our assessment.</p> <p>Hailsham North (2012-13): At draft determination, we excluded Hailsham North from the assessment on the basis that it was an iron failure attributable to maintaining phosphorus compliance. However, following an analysis of company representations and query responses we understand that the failure at Hailsham North is actually related to suspended solids. We issued a query to the company to understand this issue further. Within the query response, the company considers that the failure was due to an illegal discharge of clay sediment from a developer. We have reviewed, in detail, the company's evidence regarding Hailsham North and consider that it should not be excluded from the assessment. The evidence provided by the company did not sufficiently demonstrate that the company had undertaken sufficient actions in order to mitigate risk of further failures following the first incident (as there were a further four sample failures later in the</p> |

| Area of intervention | What we did | Why we did it |
|----------------------|-------------|--|
| | | <p>year). The evidence provided did not sufficiently demonstrate that the subsequent performance of the sand filters could be directly attributable in their entirety to this singular problem with the clay slurry discharge at the construction site. We are concerned that the third stage filters were not protected from such a failure as part of the treatment works design.</p> <p>Faversham (2011-12): We have not excluded this failure from our assessment. The evidence provided did not sufficiently demonstrate that the failures were directly related to the trader in question. The company did not provide evidence that demonstrated it had appropriately engaged with the trader in question to manage and reduce the impact on the environment.</p> <p>Lidsey (2011-12 and 2012-13): We have considered the exclusion of the numerous copper failures at Lidsey sewage treatment works. While we agree that there has been a change in the consent after the reference level and control limits were set in the final determination 2009, it is important that the company manages changes in regulatory requirements.</p> <p>We have assessed the impact on the scale of the shortfall by assessing the shortfall with and without the failures at Lidsey. In both cases, the aggregate failures across all sites are above the one standard deviation cap within the calculation as a result of failures at other treatment works. The scale of the shortfall calculation is therefore not sensitive to the inclusion of the Lidsey works. (both Faversham and Hailsham North failures already exceed the applied cap).</p> |

| Area of intervention | What we did | Why we did it |
|----------------------|-------------|---|
| | | <p>While we have accepted a number of the exclusions that the company proposed, the company's performance remains above the upper control limit for all four years between 2010-11 and 2013-14. Therefore, for the purposes of the final determination we have applied a shortfall for deteriorating performance in this indicator.</p> |

The 2009 agreed overlap programme

As the company did not propose an overlap programme at PR09, our 2009 final determination did not contain any agreed projects that would need to be reviewed in this price review. Therefore, we have not assessed any scheme progress or costs under this mechanism.

The 2014-15 transition programme

Table AA3.15 below confirms Southern Water's proposed transition programme. As in our draft determination, there are no interventions in this area.

Table AA3.15 Transition programme in 2014-15

| Net capital expenditure | 2014-15 (£ million) | Proportion of forecast in 2014-15 | Proportion of capital programme in 2015-20 |
|-------------------------|------------------------|--------------------------------------|--|
| Water service | 10.2 | 12.15% | 2.32% |
| Wastewater service | 13.8 | 7.73% | 1.03% |

CIS

Table AA3.16 provides details of the CIS ratios and performance incentive. It also gives the:

- monetary amounts of the CIS performance reward or penalty;
- true-up adjustment to 2015-20 allowed revenues; and
- adjustment to the opening RCV.

Table AA3.17 then sets out the profiled values of the revenue adjustments in each year 2015-20, table AA3.18 shows the components of the opening RCV which are included in the CIS adjustment, and table AA3.19 summarises our interventions in relation to Southern Water's proposals.

There are no representations in this area from Southern Water. The only change from our draft determination relates to use of the post-tax cost of capital as the discount rate when calculating the future value of revenue adjustments.

Table AA3.16 CIS true-up adjustments

| | | Water service | Wastewater service | Total service |
|--|--------------|---------------|--------------------|---------------|
| Restated FD09 CIS bid ratio ¹ | Company view | 124.492 | 111.991 | N/a |
| | Ofwat view | 124.491 | 112.709 | N/a |
| Out-turn CIS ratio | Company view | 142.506 | 105.129 | N/a |
| | Ofwat view | 142.512 | 106.019 | N/a |
| Incentive reward/penalty (%) ² | Company view | -8.712 | -1.595 | N/a |
| | Ofwat view | -8.713 | -1.756 | N/a |
| Reward/penalty (£m) | Company view | -35.742 | -20.538 | -56.281 |
| | Ofwat view | -35.745 | -22.414 | -58.159 |
| Adjustments to 2015-20 revenue (£m) ³ | Company view | -13.289 | -26.826 | -40.114 |
| | Ofwat view | -12.939 | -28.463 | -41.402 |
| RCV adjustment (£m) ⁴ | Company view | 77.273 | -36.331 | 40.941 |
| | Ofwat view | 77.273 | -36.331 | 40.942 |

Notes:

1. The restated FD09 CIS bid ratio takes account of the adjustments for the change protocol (table AA3.9)
2. The reward/(penalty) is adjusted for the additional income included in the 2010-15 determination and the financing cost on the difference between actual spend and capital expenditure assumed in the 2010-15 determination to derive the value of the adjustment to 2015-20 revenue.
3. The adjustment to 2015-20 revenue values shown in this table assume a single year adjustment in the first year, and do not include the NPV profiling used for the final determination.
4. In table AA3.18 we show how the components of this agree to those shown in table A2.7 and table A3.7.

Table AA3.17 Profiled revenue adjustments from the CIS reconciliation (£ million)

| | | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|------------|--------------|---------|---------|---------|---------|---------|---------|
| Water | Company view | -2.854 | -2.854 | -2.854 | -2.854 | -2.854 | -14.271 |
| | Ofwat view | -2.774 | -2.774 | -2.774 | -2.774 | -2.774 | -13.870 |
| Wastewater | Company view | -5.762 | -5.762 | -5.762 | -5.762 | -5.762 | -28.809 |
| | Ofwat view | -6.102 | -6.102 | -6.102 | -6.102 | -6.102 | -30.511 |

Table AA3.18 CIS components of the opening RCV adjustment (£ million)

| | Water service | Wastewater service |
|---|---------------|--------------------|
| Adjustment for actual expenditure 2010-15 | 130.721 | -29.605 |
| Net adjustment from logging up and logging down | -53.449 | -1.140 |
| Adjustment for shortfalls | 0.000 | -5.585 |
| RCV adjustment | 77.273 | -36.331 |

Table AA3.19 Interventions on proposed CIS adjustments

| Area of intervention | What we did | Why we did it |
|-----------------------------|--|---|
| Methodology | We have used the post-tax basis of the PR09 cost of capital for the discount rate when calculating the future value of the revenue adjustment in the 2010-15 period. | As explained in policy chapter A4, to address these issues we have changed the CIS model. |
| Change protocol adjustments | In carrying out our assessment, we have included our view of the applicable change protocol amounts for water and wastewater. | We have applied Ofwat's published methodology. |

Other adjustments

Table AA3.20 and table AA3.21 below confirm the assumptions included in this final determination with respect to the following revenue adjustments:

- tax refinancing benefit clawback;
- other tax adjustments;
- equity injection clawback; and
- other adjustments.

There are no changes from our draft determination.

Table AA3.20 Other revenue adjustments 2015-20 (£ million)

| | Water service | | Wastewater service | |
|----------------------------------|---------------|------------|--------------------|------------|
| | Company view | Ofwat view | Company view | Ofwat view |
| Tax refinancing benefit clawback | 0.000 | 0.000 | 0.000 | 0.000 |
| Other tax adjustments | 0.000 | 0.000 | 0.000 | 0.000 |
| Equity injection clawback | 0.000 | 0.000 | 0.000 | 0.000 |
| Other adjustments | 0.000 | -5.568 | 0.000 | 0.000 |

Table AA3.21 Interventions on proposed other revenue adjustments

| Area of intervention | What we did | Why we did it |
|----------------------|--|---|
| Other adjustments | <p>As for the draft determination, we have included an 'other adjustment' of -£5.6 million in the water service.</p> <p>This reflects the company's £5 million adjustment to the pre annualised RCM in its RCM calculations in order to return revenue to customers as a result of not delivering its leakage target in 2010-11.</p> | <p>We agree with the company's decision to reduce the RCM over 2015-20 as a result of a failure to meet its leakage target. The company is clearly taking accountability for its actions and is seeking to return value to customers for its shortfall in performance in this area.</p> |

Table AA3.22 and table AA3.23 below confirm the assumptions included in this final determination with respect to other adjustments to the opening RCV.

There are some minor changes from our draft determination in relation to our adjustments for land sales and for actual expenditure in 2009-10.

Table AA3.22 Other adjustments to the opening RCV (£ million)

| | Water service | | Wastewater service | |
|--------------------|---------------|------------|--------------------|------------|
| | Company view | Ofwat view | Company view | Ofwat view |
| Land sales | 0.000 | 0.473 | 0.000 | 2.554 |
| 2009-10 adjustment | -17.224 | -17.224 | -84.068 | -84.070 |
| Enhanced rewards | 0.000 | 0.000 | 0.000 | 0.000 |
| Other adjustments | 0.000 | 0.000 | 0.000 | 0.000 |

Table AA3.23 Interventions on proposed adjustments to the opening RCV

| Area of intervention | What we did | Why we did it |
|----------------------|--|---|
| Land sales | We calculated land sales using the business plan sales figures in our RCV midnight adjustment model. | This provided a consistent approach with all companies. |

Annex 4 Outcomes, performance commitments and ODIs

We set out our methodology for PCs and ODIs in policy chapter A2.

In this annex, we provide an overview of the PCs and ODIs we are proposing for Southern Water. We then set out in detail these PCs and ODIs for the company's wholesale water, wholesale wastewater and household retail outcomes, presented in that order.

The company has used a cost-sharing rate of 50% to calibrate the reward and penalty rates included in this annex. Companies are required to notify us of its menu choices by 16 January 2015. This might result in the company having a cost-sharing rate higher or lower than 50%. Once the company has chosen its position on the menu we are requiring it, in line with the methodology, to recalibrate its ODIs with the cost-sharing rate associated with that position, and provide us with the updated incentive rate calculations. The company must do this alongside their menu choice on 16 January 2015 so that the recalibrated ODIs can be included in the regulatory reporting framework for 2015-16.

We first consider the responses to our draft determination in relation to the PCs and ODIs proposed for Southern Water.

Consideration of representations on our draft determinations

In policy chapter A1, we provide a list of the non-confidential respondents to the draft determinations published in April, May and August of this year. We have fully considered all of the responses received, and where appropriate, we have made either consequential adjustments to our industry-wide approach or company-specific interventions.

Where representations have addressed issues that are common to a number of companies, these comments, and any consequential changes to our approach, are discussed in the policy chapter A2. Representations that are specific to PCs and ODIs for Southern Water, and any consequential impact on our final determination, are summarised in the tables below as follows.

- Tables AA4.1 and AA4.2 consider representations received on the interventions we proposed in our draft determination as a result of comparative assessments in six areas for wholesale water and wholesale wastewater respectively.

- Tables AA4.3 and AA4.4 consider representations received on the interventions we proposed in our draft determination as a result of our bottom-up assessments for wholesale water and wholesale wastewater respectively.
- Table AA4.5 considers representations received on the interventions we proposed in our draft determination as a result of our bottom-up assessments for household retail.
- Table AA4.6 lists the PCs that were proposed by companies but that have been removed as part of our final determination.
- Table AA4.7 lists PCs excluded from the commentary tables above because we received no representations on them and we made no interventions at draft determination or through the comparative assessments.

Table AA4.1 Representations specific to the comparative assessments on wholesale water

| PC/ODI affected | What we did at draft determination | Representations | What we did at final determination | Why we did it |
|---|---|--|--|--|
| A reliable water supply –customer minutes lost supply (>3 hr) | <p>We left the PC level at 9 minutes.</p> <p>We changed the penalty deadband and collar to 10 and 20 minutes from 2017-18 to ensure that the company is incentivised to deliver upper quartile performance.</p> | <p>Southern Water proposed that we change the penalty deadband back to 14 minutes to reflect expected variation in performance and differences in measurement between companies. The company states that because of these inconsistencies in measurement it is at greater risk of facing penalties.</p> <p>The company states that the deadband of 10 minutes that Ofwat applied in its draft determination is very close to the company’s business plan target of 9 minutes, which is consistent with its historic performance and customers' long-term priorities.</p> | <p>We maintained the PC level at 9 minutes between 2015-16 and 2019-20.</p> <p>We increased the penalty deadband from 10 minutes to 12 minutes, and the penalty collar from 20 minutes to 22 minutes, from 2017-18 to 2019-20.</p> | <p>We applied an updated comparative assessment for final determinations based on stakeholder representations on draft determinations.</p> <p>The company is performing at better than the upper quartile level and therefore we have left its PC level unchanged and have given it the penalty deadband determined by our updated comparative assessment.</p> <p>See policy chapter A2 for further details.</p> |
| High quality drinking water: Mean | Set the PC level for water quality (mean zonal compliance) at 100% by | The company states that while it shares the aspiration to get to 100% compliance, in | We intervened to set the PC level at 100%, penalty deadband at 99.95% and | We applied our comparative assessment for final determinations based on |

| PC/ODI affected | What we did at draft determination | Representations | What we did at final determination | Why we did it |
|-----------------------------------|---|---|--|--|
| Zonal Compliance (MZC) percentage | 2017-18 to meet upper quartile performance. Set the penalty deadband at 99.96% and collar at 99.94% from 2017-18 to 2019-20. | reality, historic evidence shows that achievement of this target is very rare and would require very significant investment to reliably achieve every year. It has requested that we reconsider the inclusion of this target at 100%. | collar at 99.93% from 2017-18 as per the comparative assessment. | stakeholder representations on draft determinations. See policy chapter A2 for further details. |

Table AA4.2 Representations specific to the comparative assessments on wholesale wastewater

| PC/ODI affected | What we did at draft determination | Representations | What we did at final determination | Why we did it |
|---|---|--|--|--|
| Category 3 pollution incidents (asset health) | Adjusted the company’s annual PC levels for this measure on the basis of comparative assessments, so that the company is aligned with the industry upper quartile level by 2017-18. We set its PC level at 156, penalty deadband at 156, and penalty collar at 261 from 2017-18. | The company states that this adjustment has not been applied consistently across all companies. The company goes on to state that companies were not given the opportunity to feed into the methods used in the comparative assessments, which would have enabled a number of important points with respect to the pollution | We intervened on the PC definition so that it is for category 3 incidents only. We applied new PC levels following comparative assessments. We set the PC level at 158, the penalty deadband at 175 and the penalty collar at 280 from 2017-18 | We applied our updated comparative assessment for final determinations based on stakeholder representations on draft determinations. The company’s performance was below upper quartile and therefore we intervened |

| PC/ODI affected | What we did at draft determination | Representations | What we did at final determination | Why we did it |
|--|---|---|--|--|
| | | <p>incidents target to be considered by us earlier. The company states that it has concerns with how Ofwat has normalised the data in setting the upper quartile level, and the low level of self-reporting by some companies.</p> <p>It states that we have not taken any account of future incidents caused by private pumping stations in its calculation of the upper quartile level.</p> <p>The company would like the annual targets for category 1, 2 and 3 pollution incidents to be reinstated to the levels in its business plan.</p> | <p>to 2019-20.</p> <p>We set the PC level at 285 and 221 in 2015-16 and 2016-17 to offer a glide-path to upper quartile performance.</p> <p>We set the penalty deadband in 2015-16 and 2016-17 at the company's current performance.</p> <p>We set the penalty collar in 2015-16 and 2016-17 to maintain a penalty range of 105 incidents.</p> | <p>to incentivise the company to reach upper quartile performance by 2017-18.</p> <p>See policy chapter A2 for further details.</p> |
| <p>Minimising sewer flooding – internal flooding incidents</p> | <p>Adjusted the company's annual PC levels for this measure based on the comparative assessments, so that the company is aligned with the industry upper quartile level by 2017-18.</p> | <p>The company states in its business plan that it had initially sought an exclusion from financial penalties if it incurred exceptional accounting costs. The company notes that under IFRS, the concept of exceptional costs no longer exists so the company has</p> | <p>We accepted Southern Water's representation to exclude sewer flooding incidents due to severe weather, and disregard the exceptional accounting costs exclusions.</p> | <p>We have allowed companies to exclude incidents caused by severe weather in the past, and have required companies to report on this basis.</p> |

| PC/ODI affected | What we did at draft determination | Representations | What we did at final determination | Why we did it |
|-----------------|------------------------------------|--|------------------------------------|--|
| | | <p>proposed reverting to a severe weather exclusion in line with that used for the June return previously.</p> <p>The Environment Agency noted that the number of flooding incidents will include 'severe' weather related incidents (and private sewers) but not incidents associated with 'exceptional' weather conditions. It would like to see some definitions of these events, as it believes the structure of the ODI should include incidents resulting from extreme weather events.</p> | | See policy chapter A2 for further details. |

Table AA4.3 Representations specific to the company- specific assessments on wholesale water

| PC/ODI affected | What we did at draft determination | Representations | What we did at final determination | Why we did it |
|---------------------------------|---|--|---|--|
| Ways to save water – per capita | We removed the proposed reward because the company did not demonstrate that its customers | The company has carried out an additional piece of quantitative research with its customers to | We introduced a reward of £0.6875m/l/h/d which the company proposed and | Based on the new willingness to pay evidence the reward is |

| PC/ODI affected | What we did at draft determination | Representations | What we did at final determination | Why we did it |
|-----------------|---|---|---|---|
| consumption | are willing to pay more for it performing better than its PC level. | <p>understand their preferences for ODI rewards and penalties. On average, its customers are willing to pay £1.25 on top of their average bill if the company can substantially reduce the average consumption level to 131.7 l/h/d during 2015-20. The company believes it is appropriate to retain the reward rate of £0.6875m/l/h/d. However, in its representations the company also proposes that the penalty rate should be reduced from £1.0969m/l/h/d to £0.6875m/l/h/d so that it is equal to the reward rate.</p> <p>The Environment Agency assumes these are normal year per capita consumptions and so is unable to check consistency with those in the WRMP. It notes that we have removed the reward incentive on the grounds of lack of customer willingness to pay justification. It is disappointed that</p> | <p>which is based on the new willingness to pay evidence and totex efficiency-sharing.</p> <p>We did not intervene on the penalty rate which the company proposed in its business plan.</p> | appropriate. There is insufficient evidence to support changing the penalty rate. |

| PC/ODI affected | What we did at draft determination | Representations | What we did at final determination | Why we did it |
|-----------------|--|---|---|--|
| | | <p>Southern Water has been unable to demonstrate its customers are willing to pay for further improvements. .</p> <p>The CCG supports the company's proposal to reintroduce an ODI reward on per capita consumption and would encourage Ofwat to consider something industry-wide in this area.</p> | | |
| Leakage | <p>We changed the form of incentive from an adjustment to RCV to an adjustment to revenue so that the customers who are affected by the company's performance below or above its PC level are the ones who pay for the company's reward or receive the benefit of the company's penalty.</p> <p>We increased the penalty collar from 90.4 to 96 to align the penalty range with the industry average.</p> <p>We did not intervene on the</p> | <p>The CCG believes it is appropriate that Southern Water, with its strong position on leakage, should be incentivised to raise its performance further still.</p> <p>The company believes that a similar adjustment to the one we made on its penalty collar should be made to the reward cap. The company suggests that the reward cap should be symmetrical with the penalty collar, so that the reward cap is increased to 10% below its PC</p> | <p>We maintained the intervention we made at the draft determination.</p> <p>We maintained the reward cap and penalty collar as at the draft determination.</p> | <p>Leakage is something which affects customers in the short term so a revenue adjustment is more appropriate than an RCV adjustment.</p> <p>We want to ensure that the customers who are affected by the company's performance below or above its PC level are the ones who pay for the company's reward or receive the</p> |

| PC/ODI affected | What we did at draft determination | Representations | What we did at final determination | Why we did it |
|-----------------|--|---|--|---|
| | reward cap as we considered that it was appropriate. | level, or 78Ml/day. The Environment Agency believes that Southern Water's leakage PC levels consistent with its water resources management plan. | | benefit of the company's penalty. To align the penalty and reward ranges with the industry average. |
| Asset health | Adjusted the structure of the water asset health measure so that penalties will apply for performance on any sub-measure outside of the deadbands in a single year, rather than in two consecutive years. We increased the penalty rate for mains bursts. | The company states that annual deviations from the target are not reflective of risk to long-term asset health if performance is recovered, and therefore should not result in financial penalties. The company believes that we have not intervened in the same way across companies and Ofwat's interventions are not consistent with the way it has applied the serviceability methodology in PR09 to calculate companies' shortfall penalties. The company believes that we should revert to the company's original proposal so that deadbands need to be breached | We retained our draft determination position that penalties are incurred in every year for which performance falls below the penalty deadband. We changed the penalty rate for mains bursts back to what the company proposed in its business plan. | The requirement for two or more consecutive years of poor performance would effectively dilute penalties for poor performance. Company is subject to more than one legacy PR09 serviceability shortfall, so dilution of incentives could undermine protection of customers. In order to prevent this, asset health measures should apply after any single year of poor performance rather than only after two |

| PC/ODI affected | What we did at draft determination | Representations | What we did at final determination | Why we did it |
|-----------------|---|--|------------------------------------|--|
| | | <p>in two consecutive years before financial penalties apply. This should also apply to the sub-measures which were originally part of its asset health measures but which we have applied as separate ODIs for simplicity. These measures are interruptions to supply and water pressure. The company restates its business plan proposal that if the deadbands are breached for two consecutive years, a penalty will apply to both years so that customers are fully protected.</p> | | <p>consecutive years of poor performance. This approach has been applied across all companies subject to more than one legacy PR09 serviceability shortfall.</p> <p>The company is not to be shortfalled for mains bursts.</p> |
| Woolmans Wood | <p>No intervention. This is a PC that the company proposed in its representations on its draft determination.</p> | <p>The company has proposed a PC and ODI for this scheme.</p> | <p>We have removed this PC.</p> | <p>We considered that the company had not sufficiently justified the incremental totex for this scheme, and had not made a sufficient case that the costs are not already included in the totex baseline. Therefore, the allowed</p> |

| PC/ODI affected | What we did at draft determination | Representations | What we did at final determination | Why we did it |
|-----------------|------------------------------------|-----------------|------------------------------------|---|
| | | | | totex for its proposed PC is zero and no ODI penalty should apply for non-delivery. |

Table AA4.4 Representations specific to the company- specific assessments on wholesale wastewater

| PC/ODI affected | What we did at draft determination | Representations | What we did at final determination | Why we did it |
|-----------------|--|--|--|--|
| Asset health | <p>Adjusted the structure of the water asset health measure so that penalties will apply for performance on any sub-measure outside of the deadbands in a single year, rather than in two consecutive years.</p> <p>We increased all wastewater asset health penalty rates by 25%.</p> | <p>The company states that annual deviations from the target are not reflective of risk to long-term asset health if performance is recovered, and therefore should not result in financial penalties. The company believes that we have not intervened in the same way across companies and Ofwat’s interventions are not consistent with the way it has applied the serviceability methodology in PR09 to calculate companies’ shortfall</p> | <p>We retained our draft determination position that penalties are incurred in every year for which performance falls below the penalty deadband.</p> <p>We changed the penalty rate back to what the company proposed in its business plan for all asset health sub-measures except flooding other causes and wastewater treatment works p.e. compliance.</p> | <p>The requirement for two or more consecutive years of poor performance would effectively dilute penalties for poor performance. Company is subject to more than one legacy PR09 serviceability shortfall, so dilution of incentives could undermine protection of customers. In order to prevent this, asset health measures should apply after any single year of poor performance rather than only after two consecutive</p> |

| PC/ODI affected | What we did at draft determination | Representations | What we did at final determination | Why we did it |
|-----------------|------------------------------------|---|------------------------------------|--|
| | | <p>penalties.</p> <p>The company believes that we should revert to the company's original proposal so that deadbands need to be breached in two consecutive years before financial penalties apply. This should also apply to the sub-measures which were originally part of its asset health measures but which we have applied as separate ODIs for simplicity. These measures are interruptions to supply and water pressure. The company restates its business plan proposal that if the deadbands are breached for two consecutive years, a penalty will apply to both years so that customers are fully protected.</p> <p>The Environment Agency states it is pleased to note</p> | | <p>years of poor performance. This approach has been applied across all companies subject to more than one legacy PR09 serviceability shortfall.</p> <p>The company is to be shortfalled for flooding other causes and wastewater treatment works p.e. compliance.</p> |

| PC/ODI affected | What we did at draft determination | Representations | What we did at final determination | Why we did it |
|--|--|--|--|---|
| | | <p>that we have changed the performance levels for pollution incidents to ensure that the company is incentivised to achieve upper quartile performance. It expects there to be a trend to minimise all pollution incidents (category 1 to 3) by 2020. There should be at least a third reduction compared to the numbers of incidents recorded in 2012.</p> | | |
| <p>WWTW % population equivalent compliance</p> | <p>We introduced wastewater treatment works % population equivalent compliance as a sub-measure of the wastewater asset health ODI. We have introduced this measure to ensure that Southern remain incentivised to perform in this area, as it is an area where we are shortfalling it for its performance during 2010-15.</p> | <p>The company recognised that this measure has been used as a serviceability measure for a number of years. However, it does not believe that it is an effective or well-targeted measure and its inclusion disadvantages them when compared with the rest of the industry.</p> <p>The company considers that this sub-measure should be</p> | <p>We retained this as an asset health sub-measure with the PC level of 100.0%, deadband of 99.9% and penalty collar of 99.8% as at the draft determination.</p> <p>We increased the penalty rate to £14.95m/0.1%.</p> | <p>Since the company has a shortfall in this area, it is important for it to improve its performance and protect the environment.</p> <p>We set the penalty rate so that the maximum penalty for WWTW p.e. compliance is equal to one quarter of the sewerage non-infrastructure totex between 2010-11 and 2014-15 which relates to</p> |

| PC/ODI affected | What we did at draft determination | Representations | What we did at final determination | Why we did it |
|-----------------|------------------------------------|---|------------------------------------|--|
| | | <p>excluded from the wastewater asset health measure. The potential financial penalty of £19m associated with this measure should be reallocated to the WWTW compliance sub-measure of the asset health ODI, in line with Southern's original proposals. The company states that if it is retained, it is essential that the target and deadband are set at the average industry level which applied in AMP5.</p> | | <p>wastewater treatment works compliance. These totex categories are '% of total p.e. served by sewage treatment works in breach of WRA or UWWTD consent (LUT)', 'equipment failures' and 'enhancement associated maintenance.'</p> <p>The totex is £299m as per the company's updated cost data. Calibrating this with the totex efficiency-sharing rate gives £149.5m. Allocating this maximum penalty equally between wastewater treatment works p.e. compliance and numeric compliance means £74.75m for each. Applying the p.e. compliance penalty equally across the five years between 2015-16 and 2019-20, and converting it to a unit rate per 0.1% between the penalty</p> |

| PC/ODI affected | What we did at draft determination | Representations | What we did at final determination | Why we did it |
|-----------------|--|---|---|--|
| | | | | <p>dead band and collar gives a penalty rate of £14.95m.</p> <p>Consistent with the approach adopted for other PCs, we have not allowed companies' performance to reduce, as this is not in the interests of customers. Therefore, we have not set the company's deadband and collar at average AMP5 industry levels as these are below the company's proposals for 2015-2020.</p> |
| Sewer Blockages | <p>We considered the deadband for asset health measures to be unnecessarily wide. Therefore, we significantly tightened the deadbands associated with sewer blockages as compared with the company's July proposal. We increased the penalty rate by 25% as we assumed a shortfall in the draft.</p> | <p>Southern Water states that since the adoption of private sewers in October 2011, the level of sewer blockages has grown significantly. It thinks there remains significant uncertainty around the reporting of incidents related to former private sewers and it is likely that it still does not know the underlying level of</p> | <p>We maintained the deadband at 0.59 blockages/km as per the draft determination.</p> <p>We changed the penalty rate back to its original level of £16.276m, that is, we removed the 25% uplift.</p> | <p>We concluded that the penalties without uplifts would be sufficient to protect customers against non-delivery and provide appropriate incentives to the company to deliver.</p> |

| PC/ODI affected | What we did at draft determination | Representations | What we did at final determination | Why we did it |
|-----------------|---|--|------------------------------------|---------------|
| | <p>determination for its performance over 2010-15 against wastewater asset serviceability measures.</p> <p>We changed the form of incentive from an adjustment to RCV to a revenue adjustment because this ensured that the customers who are affected by poor performance in the short term are the ones who are compensated for it.</p> | <p>blockages experienced on these assets. It therefore suggests that Ofwat should revert back to the company's original July proposals, which provide an appropriate balance of risk, in the light of this uncertainty.</p> <p>The Environment Agency states that it is disappointing that the company is not planning to improve its performance on sewer blockages given the relationship between sewer blockages, pollution and flooding.</p> | | |

| PC/ODI affected | What we did at draft determination | Representations | What we did at final determination | Why we did it |
|---|---|---|---|--|
| Minimising sewer flooding – internal flooding incidents | We have changed the form of incentive from an adjustment to RCV to a revenue adjustment. | | We maintained our intervention from the draft determination. | Internal sewer flooding is something which affects customers in the short term so a revenue adjustment is more appropriate than an RCV adjustment. We want to ensure that the customers who are affected if the company's performance falls below its PC level are the ones who receive the benefit of the company's penalty. |
| Limit unpleasant smells – Customer complaints for wastewater treatment works and pumping stations | We introduced a financial penalty to ensure customers are protected from non-delivery of the proposed improvement schemes for AMP6 at Portswood and Tonbridge WWTW. | The company's analysis in its representations shows that the expected annual variation in the number of odour complaints greatly exceeds the planned reduction of 20 complaints per year. Therefore, attaching a financial penalty to the number of odour complaints would not successfully protect customers from the non- | We maintained our draft determination intervention of a PC level of 20 odour complaints in 2018-19 and 2019-20. We maintained our draft determination intervention of a penalty-only ODI with the rate based on incremental totex. | Given Southern Water's own statements that this is a customer priority, and there is no overlap with other ODIs, it is appropriate to maintain a financial ODI. We do not think it is appropriate to make the ODI non-financial in order to address variability. The scheme is designed to reduce the number of complaints by a specific |

| PC/ODI affected | What we did at draft determination | Representations | What we did at final determination | Why we did it |
|-----------------|------------------------------------|--|------------------------------------|---|
| | | <p>delivery of schemes.</p> <p>The company believes that an ODI linked specifically to non-delivery of the schemes in question would be more effective in protecting customers from the risk on non-delivery. The total number of odour complaints would remain as a strong reputational ODI, linked to a clear promise in its Business Plan. The company stated it would report its performance annually to its Customer Advisory Panel, customers and stakeholders so they can hold them to account.</p> <p>The company proposes a 'log-down' ODI for which the costs associated with delivering the two planned odour reduction schemes are returned to customers in the event of non-delivery.</p> | | <p>amount and therefore we consider a penalty-only ODI with a unit rate per complaint is appropriate.</p> |

| PC/ODI affected | What we did at draft determination | Representations | What we did at final determination | Why we did it |
|---|---|---|--|---|
| Wastewater treatment works numeric compliance | Set the penalty rate equal to half the incremental totex, plus 25%. | The company states that Ofwat has increased the incentive rates by 25% for all measures for which it will face a shortfall for its performance during 2010-15, including wastewater treatment works compliance. It considers that Ofwat's justification for this adjustment is to "ensure customers are protected in future" following the imposition of shortfalls in the draft determination in relation to these measures. However, the company notes that this adjustment has only been applied to Southern Water and Thames Water's plans. The company states that Ofwat has not provided an explanation for why it has intervened in this way inconsistently across companies, nor has it | We set the maximum penalty equal to the relevant costs for sewerage non-infrastructure, calibrated with the totex efficiency-sharing rate of 50% and split equally between the wastewater treatment works numeric and population equivalent compliance PCs. We set the PC level at 100%, penalty deadband at 97.7% and penalty collar at 96.8%. We accepted the company's two additional requirements. | <p>Since the company has a shortfall in this area, it is important for it to improve performance and protect the environment.</p> <p>We set the penalty rate so that the maximum penalty for WWTW numeric compliance is equal to one quarter of the sewerage non-infrastructure totex between 2010-11 and 2014-15 which relates to wastewater treatment works compliance. These totex categories are '% of total p.e. served by sewage treatment works in breach of WRA or UWWTD consent (LUT)', 'equipment failures' and 'enhancement associated maintenance.'</p> <p>The totex is £299m as per the company's updated cost data. Calibrating this with the totex efficiency-sharing rate</p> |

| PC/ODI affected | What we did at draft determination | Representations | What we did at final determination | Why we did it |
|-----------------|------------------------------------|---|------------------------------------|--|
| | | <p>provided any justification for the increase being 25%, as opposed to any other scale of adjustment.</p> <p>Also, on its wastewater treatment works compliance measure the company has proposed to include two additional requirements: compliance is only required on numeric WRA/UWWTD permits, and compliance with NEP4 and NEP5 permits is based on funded schemes against current known standards and not any subsequent revisions following the final determination.</p> <p>The Environment Agency does not support the use of rewards for improving performance on permit compliance, as these are statutory requirements. It is</p> | | <p>gives £149.5m. Allocating this maximum penalty equally between wastewater treatment works p.e. compliance and numeric compliance means £74.75m for each. Applying the numeric compliance penalty equally across the five years between 2015-16 and 2019-20, and converting it to a unit rate per 0.1% between the penalty deadband and collar gives a penalty rate of £1.661m.</p> <p>Consistent with the approach adopted for other PCs, we have not allowed companies' performance to reduce, as this is not in the interests of customers. Therefore, we have not set the company's deadband and collar at average AMP5 industry levels as these are below the</p> |

| PC/ODI affected | What we did at draft determination | Representations | What we did at final determination | Why we did it |
|--|--|---|---|---|
| | | <p>disappointed that the company is not planning to improve its wastewater treatment works compliance over the planning period.</p> | | <p>company's proposals for 2015-2020.</p> |
| <p>Clean beaches and coastal waters – Bathing Waters at Excellent Standard</p> | <p>We have not intervened on this PC and ODI but, as funding for the proposed improvements has not been allowed, we stated that the company may wish to make revised proposals in its response to the draft determination.</p> <p>While we did not accept the evidence on costs, we have not intervened on the structure of the ODI because we considered this was acceptable.</p> | <p>The company has revised its proposed ODI for delivering seven additional 'excellent' quality bathing waters during AMP6. The revised ODI mechanism is formed of three component parts:</p> <p>Part 1 – maintenance of the current level of beaches with 'excellent' bathing water quality.</p> <p>Part 2 – delivery of seven targeted bathing water improvements for AMP6.</p> <p>Part 3 – protection for customers from windfall gain.</p> <p>The Environment Agency notes that the costs associated with the delivery of</p> | <p>We allowed the revised ODI for parts 1 and 3 (maintain current number of 'excellent' bathing waters and account for cost differences).</p> <p>We intervened on part 2 (increase the number of 'excellent' bathing waters) by increasing the penalty rate to include 50% of benefits foregone, should the company not deliver the scheme.</p> | <p>We consider that the three-part ODI sufficiently protects customers against non-delivery and provides appropriate incentives to the company to deliver.</p> <p>We intervened on part 2 to increase the penalty rate because we considered that a penalty based solely on totex was insufficient to protect customers, and should instead be based on totex and customer benefits foregone should the company not deliver the scheme.</p> |

| PC/ODI affected | What we did at draft determination | Representations | What we did at final determination | Why we did it |
|-----------------|------------------------------------|--|------------------------------------|---------------|
| | | <p>this PC have been disallowed despite strong support from Southern Water's customers. It has encouraged the company to seek its advice in developing better evidence. It notes that the company has not developed an ODI for bathing water compliance. It states that all designated bathing waters must meet the regulatory 'sufficient' standard by 2016. Meeting the excellent standard at an additional seven beaches, notwithstanding the customer support, is secondary to achieving 100% bathing water compliance at 'sufficient' standard. It expects the company to meet this statutory requirement.</p> <p>The CCG stated that it has always been supportive of this particular area of work</p> | | |

| PC/ODI affected | What we did at draft determination | Representations | What we did at final determination | Why we did it |
|------------------------------------|---|---|--|--|
| | | <p>because of the enormous importance placed upon it by customers and stakeholders. As a result, the CCG has encouraged Southern Water to increase the pace and scale of the work proposed so that both investigations and schemes are carried out within the next business plan period (that is, AMP6). The CCG stated that it would be extremely disappointed if the work was unable to progress and so has worked closely with the company to try to find a way which can meet customers' and stakeholders' aspirations as well as Ofwat's requirements. The CCG fully supports the company's proposals.</p> | | |
| <p>Minimise carbon emissions –</p> | <p>A financial penalty has been introduced to ensure customers are protected from</p> | <p>The company states that the rationale for our intervention is to ensure customers are</p> | <p>We changed the ODI to be non-financial in order to protect customers from under</p> | <p>We consider that the proposed approach provides sufficient protection for</p> |

| PC/ODI affected | What we did at draft determination | Representations | What we did at final determination | Why we did it |
|--|--|--|---|--|
| Percentage of energy consumption from renewables | non-delivery of the proposed increase in renewable energy. | protected from non-delivery of planned improvements in AMP6. It does not believe this is an appropriate adjustment as the draft determination cost models did not make any allowance, either explicitly or implicitly, for the two wind turbine schemes required to deliver the target. The company stated that since it is not being funded through the price control for our wind turbine schemes, it should not face any financial penalties for failure to deliver these schemes. In addition, the company states that it has made a promise to its customers to deliver these schemes and so faces a strong reputational incentive to make the improvements. The company considers that this is sufficient to protect | delivery. We amended the definition in the 'PCs and ODIs in detail' section of this final determination to match the company's representation. | customers and it is not appropriate to introduce a financial penalty given that the company is not receiving totex to deliver this PC. |

| PC/ODI affected | What we did at draft determination | Representations | What we did at final determination | Why we did it |
|--|---|--|---|--|
| | | <p>customers.</p> <p>The company states that if the ODI is retained then an explicit adjustment of £9.15m should be made to its cost threshold to fund these schemes.</p> <p>Also, the company proposed a change to the wording in the 'necessary details on measurement units' section, in line with its customer priorities, so that the definition is 'percentage of renewable energy generated out of total operational energy.'</p> | | |
| Rivers and streams free from pollution – cat 1/2 pollution incidents | Removed the reward component of the company's 'serious pollution incidents' ODI on the basis that it is not appropriate for companies to earn rewards for performance if they are still causing category 1 or 2 pollution | The company believes that, given the new guidelines published in February 2014 by the Sentencing Council for judges and magistrates on sentencing for environmental offences, the penalty component of this ODI is no longer necessary or | We changed the ODI to be non-financial. | We consider that the company's customers are sufficiently protected by the penalties which the Sentencing Council has published guidelines on. |

| PC/ODI affected | What we did at draft determination | Representations | What we did at final determination | Why we did it |
|-----------------|---|--|--|---|
| | incidents. | <p>appropriate. The company proposes that the PC should be reputational only.</p> <p>The Environment Agency does not support the use of a reward incentive by the company to meet its statutory requirements on serious pollution incidents and is pleased that we have disallowed this. The Environment Agency supports the company's proposal to reduce serious (category 1 and 2) pollution incidents to zero incidents by 2020</p> | | |
| Thanet sewers | We required the company to introduce a PC and ODI to ensure customers are protected against non-delivery of the Thanet sewers scheme. | The company accepted our requirement in the draft determination and has proposed a PC and ODI for this scheme. | <p>We increased the penalty rate to £31.208m to reflect benefits foregone and introduced an annual penalty for delay set at 50% of annualised costs, or £0.950m.</p> <p>We estimated the benefits figure using the benefit/cost ratio of the regulatory impact</p> | To protect customers against non-delivery and provide appropriate incentives to the company to deliver. |

| PC/ODI affected | What we did at draft determination | Representations | What we did at final determination | Why we did it |
|------------------|--|--|---|---|
| | | | assessment of the original Groundwater Directive. | |
| Millbrook sludge | We required the company to introduce a PC and ODI to ensure customers are protected against non-delivery of the Millbrook sludge scheme. | The company accepted our requirement in the draft determination and has proposed a PC and ODI for this scheme. | We increased the penalty rate to £1,889/tonne based on totex (calibrated with the totex efficiency-sharing rate of 50%) plus an uplift of 25%. | To protect customers against non-delivery and provide appropriate incentives to the company to deliver. The uplift in the penalty rate is to ensure that the company is not indifferent between delivering the scheme and not. |
| Woolston WWTW | No intervention. | The company has proposed a PC and ODI for this scheme. | We increased the penalty rate to £21.696 to reflect benefits foregone and introduced a penalty for delay set at 50% of annualised costs, or £0.900m. We used the PR09 final determination benefits figures as this is a scheme which the company has deferred from AMP5. | To protect customers against non-delivery and provide appropriate incentives to the company to deliver. |

Table AA4.5 Representations specific to the company-specific assessments on household retail

| PC/ODI affected | What we did at draft determination | Representations | What we did at final determination | Why we did it |
|-----------------|------------------------------------|---|--|---|
| SIM | N/a | CCWater proposes that we should continue to apply SIM to the wholesale business to ensure that the monopoly wholesale business is incentivised to resolve problems quickly and effectively for customers and retailers. | We have confirmed the approach adopted at draft determination. | We are not requiring the company to include a SIM PC in the wholesale control – the PR14 methodology confirmed that we would use the SIM as a standard minimum national incentive for customer service for 2015-20. We also confirmed that its likely scale and scope would be similar to the current SIM, but that (in England) it would apply only to the household retail price control. |

Table AA4.6 Performance commitments proposed by the company that we have removed from this final determination

| Performance commitment | Reason for its removal |
|------------------------|--|
| Wholesale water | |
| Woolmans Wood | We concluded that the company had not sufficiently justified incremental totex for this scheme, and had not made a sufficient case that the costs are not already in base totex. Therefore, the allowed totex for its proposed PC is zero and no ODI penalty |

| Performance commitment | Reason for its removal |
|------------------------|--|
| | should apply for non-delivery. However, because the totex for the scheme has been included in base totex, we still expect the company to deliver it between 2015 and 2020. |

Table AA4.7 Performance commitments excluded from the commentary tables because we received no representations to our draft determinations on them and we made no interventions at draft determination or through the comparative assessments

| Wholesale water | Wholesale wastewater | Household retail |
|---|--|---|
| A reliable water supply: number of properties experiencing a temporary use ban before two dry winters | Avoiding blocked drains – customer awareness | Resolve queries the first time of contact |
| Water pressure: number of properties below threshold | | Customers surveyed agreeing with the statement that we dealt with their individual needs and those of their community |
| Sustainable water and wastewater – distribution input | | Reduction in Customer Contacts related to Bills |
| | | Customers surveyed agreeing with the statement that they know how their money is used by Southern Water |
| | | Increased take up of an Assistance Scheme |
| | | Customers surveyed agreeing with the statement that the services provided by us are Value for Money |

Summary of ODIs

For each outcome proposed, companies were asked to identify one or more measures that would provide evidence that the outcome was being delivered. On each measure, companies had to set out the level of performance that they were committing to deliver. Companies also had to explain why they committed to the performance level chosen and explain why this represented an appropriate level of stretch (as benchmarked against an upper quartile level of performance across the sector).

Companies also had to propose ODIs. Where customers were willing to pay for higher levels of performance and companies could demonstrate that performance was at a high level relative to its peers, then the financial incentives could contain rewards for over delivery as well as penalties for under delivery.

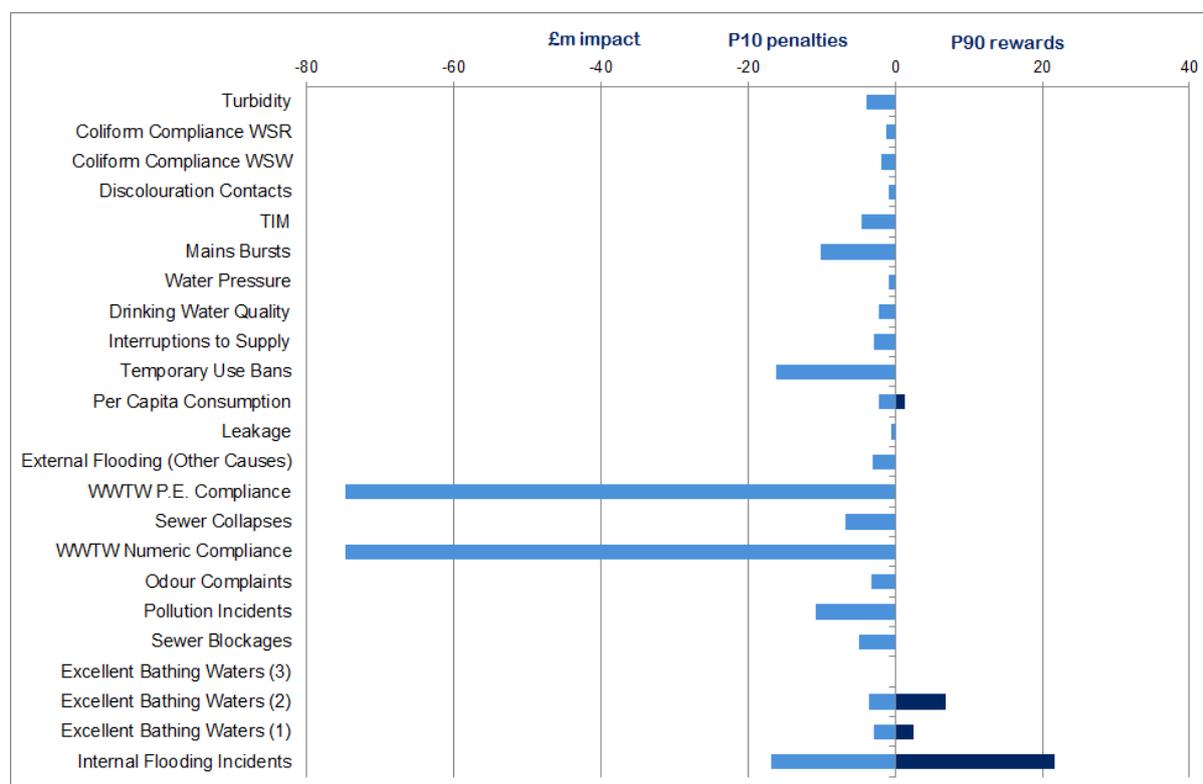
Table AA4.8 shows the balance between reward and penalty, penalty only and reputational incentives in the package of incentives for the company, and figure AA4.1 shows the potential financial impact of each of the financial incentives.

Table AA4.8 The composition of the package of ODIs

| | Reward and penalty | Penalty only | Non-financial incentive |
|----------------------|--------------------|--------------|-------------------------|
| Wholesale water | 2 | 6 | 1 |
| Wholesale wastewater | 3 | 9 | 4 |
| Household retail | 1 | 0 | 7 |
| Total | 6 | 15 | 12 |

The following graph shows the potential financial consequences of the individual financial ODIs. The figures represent the penalties and rewards associated with the p10 and p90 scenarios over the five years (2015-16 to 2019-20). This means there is a 10% chance of performance being higher or lower than these assumed levels. In most cases, the potential maximum will be bigger but is very unlikely to occur. The p10 and p90 therefore represent a more realistic estimate of potential financial consequences.

Figure AA4.1 Overview of financial ODIs



In Figure AA4.1 above, as the company did not provide information on p10 penalties, the figures for all asset health measures (including Wastewater Treatment Works (WWTW) compliance) are based on maximum penalties. These penalties would apply only in the circumstance that the company failed to deliver to the maximum extent specified in the incentives.

As explained in the outcomes policy chapter, we are introducing an aggregate cap on rewards and collar on penalties from the ODIs. Details of how the cap/collar will operate are set out in section A2.4 of the policy chapter A2.

There are a number of specific exclusions from the cap/collar. For Southern Water, the exclusions are as follows:

- Thanet sewers
- Millbrook sludge
- Woolston wastewater treatment works
- penalties associated with “Bathing waters with excellent water quality”.

In the remainder of this chapter, we provide the following information on each PC we are including as part of this final determination:

- the name and detailed definition of the PC;
- the type of incentive;
- the PC level;
- for financial incentives:
 - the limits on rewards and penalties (caps and collars) and neutral zones (deadbands) as applicable⁵; and
 - the incentive rates;
- additional details on the measure; and
- where Ofwat has not accepted the company's proposals, the nature of the intervention made is also explained.

Appendix 1 of our final methodology statement contains a number of worked examples that illustrate how the different incentive types will operate.

⁵ Unless otherwise stated, a deadband is the level of service against which an incentive is calculated and the cap or collar is the level of service at which the maximum reward or penalty occurs. So for example, if the deadband is 1.29 and the actual performance level is 1.39, the result of the incentive would be a penalty of (1.39-1.29) times the specified penalty rate.

Performance commitments and ODIs in detail

Wholesale water outcome 1: A constant supply of high quality drinking water

Performance commitment 1: Water asset health

Detailed definition of performance measure: Composite measure, consisting of the following components:

- Number of mains bursts per year
- TIM distribution index
- Coliform compliance at WSW
- Coliform compliance at WSR
- Turbidity compliance

Incentive type: Financial – penalty only

Performance commitments

| | Unit | Starting level | Committed performance levels | | | | |
|------------------|------|----------------|---|---------|---------|---------|---------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| PC | | | Stable | Stable | Stable | Stable | Stable |
| Penalty collar | | | See individual parameters below (lower performance level) | | | | |
| Penalty deadband | | | See individual parameters below (upper performance level) | | | | |

Incentive rates

| Incentive type | Performance levels | | Incentive rate |
|----------------|--------------------|-------------|-----------------------------|
| | Lower | Upper | |
| Mains bursts | 2865 bursts | 2383 bursts | £4,170 per burst per year |
| TIM | 99.74% | 99.82% | £115,875 per 0.01% per year |

| Incentive type | Performance levels | | Incentive rate |
|-----------------------------|--------------------|--------|----------------------------|
| | Lower | Upper | |
| Coliform compliance WSW (%) | 99.88% | 99.92% | £97,500 per 0.01% per year |
| Coliform compliance WSR (%) | 98% | 99% | £250,000 per % per year |
| Turbidity (number of sites) | 10 | 6 | £195,000 per site per year |

Additional details

| | |
|--|---|
| Necessary detail on measurement units | Stable performance means that performance for all components of the ODI is better than the upper performance levels. Measurement to follow guidelines as defined for the Ofwat KPIs in 'Key performance indicators – guidance', IN 13/03. |
| Frequency of PC measurement and any use of averaging | Performance will be measured and reported annually. |
| Timing and frequency of rewards/penalties | <p>Penalties apply at the end of the AMP period. Penalties will apply for performance below the upper level (deadband) for all years for all individual parameters. Penalties apply up to and including the lower performance level (collar) for all years for all parameters.</p> <p>The impact of severe weather conditions will be taken into account. As with the previous serviceability mechanism, any extreme weather will be adjusted for after the event, and any adjustments will be independently assured.</p> |
| Form of reward/penalty | Revenue-based penalty which is to be funded through an equivalent adjustment to the RCV. |
| Any other information or clarifications relevant to correct application of incentive | The components of this performance measure will be assessed individually. An overall penalty will then be imposed against the water asset health measure based on the combined performance against these individual commitments. |

Performance commitment 2: Water use restrictions

Detailed definition of performance measure: The number of properties affected by temporary use bans between 2015-16 and 2019-20, before two dry winters

Incentive type: Financial – penalty only

Performance commitments

| | Unit | Starting level | Committed performance levels | | | | |
|------------------|------------|----------------|------------------------------|-----------|-----------|-----------|-----------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| PC | Prop /year | | 0 | 0 | 0 | 0 | 0 |
| Penalty collar | Prop /year | | 1,095,338 | 1,095,338 | 1,095,338 | 1,095,338 | 1,095,338 |
| Penalty deadband | Prop /year | | 0 | 0 | 0 | 0 | 0 |

Incentive rates

| Incentive type | Incentive rate (£/property/year) |
|----------------|----------------------------------|
| Penalty | 14.85 |

Additional details

| | |
|---|--|
| Necessary detail on measurement units | The number of properties affected by temporary use bans before two consecutive dry winters between 2015-16 and 2019-20. A dry winter is defined as less than 85% of the long-term average annual rainfall level. |
| Frequency of PC measurement and any use of averaging | Performance will be measured and published annually and at the end of the AMP period. |
| Timing and frequency of rewards/penalties | Penalties will apply at the end of the AMP period. Penalties will apply for every year that the outturn is greater than the deadband. |
| Form of reward/penalty | Revenue adjustment. |

| | |
|--|------|
| Any other information or clarifications relevant to correct application of incentive | N/a. |
|--|------|

Performance commitment 3: Leakage

Detailed definition of performance measure: The total level of leakage, including customer supply-pipe leakage, expressed in megalitres per day (MI/day)

Incentive type: Financial – reward and penalty

Performance commitments

| | Unit | Starting level | Committed performance levels | | | | |
|------------------|------|----------------|------------------------------|---------|---------|---------|---------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| PC | MI/d | 88 | | | | | 87 |
| Penalty collar | MI/d | | | | | | 96 |
| Penalty deadband | MI/d | | | | | | 87 |
| Reward deadband | MI/d | | | | | | 85 |
| Reward cap | MI/d | | | | | | 83.6 |

Incentive rates

| Incentive type | Incentive rate (£/MI/d/year) |
|----------------|------------------------------|
| Penalty | 139,007 |
| Reward | 112,304 |

Additional details

| | |
|--|--|
| Necessary detail on measurement units | Measure to be as defined for the Ofwat KPI in IN 13/03. |
| Frequency of PC measurement and any use of averaging | Performance will be measured and reported annually, and at the end of the AMP period as a five-year average. |
| Timing and frequency of rewards/penalties | Penalties apply at the end of the AMP based on performance against the five-year average target. |
| Form of reward/penalty | Revenue adjustment. |
| Any other information or clarifications relevant to correct application of incentive | N/a. |

Performance commitment 4: Interruptions to supply

Detailed definition of performance measure: Average minutes per property lost through water supply interruptions of greater than three hours between 2015-16 and 2019-20

Incentive type: Financial – penalty only

Performance commitments

| | Unit | Starting level | Committed performance levels | | | | |
|------------------|------------------|----------------|------------------------------|---------|---------|---------|---------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| PC | Minutes/property | 9 | 9 | 9 | 9 | 9 | 9 |
| Penalty collar | Minutes/property | | 22 | 22 | 22 | 22 | 22 |
| Penalty deadband | Minutes/property | | 12 | 12 | 12 | 12 | 12 |

Incentive rates

| Incentive type | Incentive rate (£/minute/property/year) |
|----------------|---|
| Penalty | 58,875 |

Additional details

| | |
|--|--|
| Necessary detail on measurement units | Measurement of performance will follow the guidelines as defined for the Ofwat KPIs in 'Key performance indicators – guidance', IN 13/03. The impact of severe weather conditions will be taken into account. As with the previous serviceability mechanism, any extreme weather will be adjusted for after the event, and any adjustments will be independently assured. |
| Frequency of PC measurement and any use of averaging | Performance will be measured and reported annually. |
| Timing and frequency of rewards/penalties | Penalties apply at the end of the AMP period. Penalties will apply for every year that the outturn is greater than the deadband, up to the collar. |
| Form of reward/penalty | Revenue adjustment. |
| Any other information or clarifications relevant to correct application of incentive | N/a. |

Performance commitment 5: Drinking water quality – mean zonal compliance

Detailed definition of performance measure: Compliance with the Drinking Water Inspectorate (DWI) regulations as measured by mean zonal compliance (MZC)

Incentive type: Financial – penalty only

Performance commitments

| | Unit | Starting level | Committed performance levels | | | | |
|------------------|------|----------------|------------------------------|---------|---------|---------|---------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| PC | % | 99.94 | 99.95 | 99.95 | 100.00 | 100.00 | 100.00 |
| Penalty collar | | | 99.91 | 99.91 | 99.93 | 99.93 | 99.93 |
| Penalty deadband | | | 99.93 | 99.93 | 99.95 | 99.95 | 99.95 |

Incentive rates

| Incentive type | Incentive rate (£/0.01% per year) |
|----------------|-----------------------------------|
| Penalty | £225,000 |

Additional details

| | |
|--|---|
| Necessary detail on measurement units | Performance against this measure is published by the DWI. |
| Frequency of PC measurement and any use of averaging | Performance will be measured and reported annually. |
| Timing and frequency of rewards/penalties | Penalties apply at the end of the AMP period. Penalties will apply for every year that performance is at or below the deadband, up to a maximum penalty at the collar. |
| Form of reward/penalty | Revenue adjustment. |
| Any other information or clarifications relevant to correct application of incentive | N/a. |

Performance commitment 5a: Drinking water quality – discolouration contacts

Detailed definition of performance measure: the number of customer contacts regarding the discoloration of their drinking water, expressed as the number of contacts per 1,000 population

Incentive type: Financial – penalty only

Performance commitments

| | Unit | Starting level | Committed performance levels | | | | |
|------------------|------|----------------|------------------------------|---------|---------|---------|---------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| PC | | 0.90 | 0.87 | 0.85 | 0.82 | 0.82 | 0.82 |
| Penalty collar | | | 1.21 | 1.21 | 1.17 | 1.17 | 1.17 |
| Penalty deadband | | | 0.90 | 0.90 | 0.86 | 0.86 | 0.86 |

Incentive rates

| Incentive type | Incentive rate (£m/1.00 contacts/1,000 population) |
|----------------|--|
| Penalty | 0.571 |

Additional details

| | |
|--|--|
| Necessary detail on measurement units | Performance against this measure is published by the DWI. |
| Frequency of PC measurement and any use of averaging | Performance will be measured and reported annually. |
| Timing and frequency of rewards/penalties | Penalties apply at the end of the AMP period. Penalties will apply for every year that performance is at or below the deadband, up to a maximum penalty at the collar. |
| Form of reward/penalty | Revenue adjustment. |
| Any other information or | N/a. |

clarifications relevant to correct application of incentive

Performance commitment 6: Water pressure

Detailed definition of performance measure: Number of properties on the DG2 low water pressure register

Incentive type: Financial – penalty only

Performance commitments

| | Unit | Starting level | Committed performance levels | | | | |
|------------------|------------|----------------|------------------------------|---------|---------|---------|---------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| PC | Properties | 257 | 257 | 257 | 257 | 257 | 257 |
| Penalty collar | Properties | | 336 | 336 | 336 | 336 | 336 |
| Penalty deadband | Properties | | 296 | 296 | 296 | 296 | 296 |

Incentive rates

| Incentive type | Incentive rate (£/property/year) |
|----------------|----------------------------------|
| Penalty | 4,450 |

Additional details

| | |
|--|---|
| Necessary detail on measurement units | Measurement of performance will follow the guidelines as defined for the Ofwat KPIs in 'Key performance indicators – guidance', IN 13/03. |
| Frequency of PC measurement and any use of averaging | Performance will be measured and reported annually. |
| Timing and frequency of | Penalties apply at the end of the AMP period. Penalties will apply for every year that the outturn is |

| | |
|--|--|
| rewards/penalties | greater than the deadband, up to the collar. |
| Form of reward/penalty | Revenue adjustment. |
| Any other information or clarifications relevant to correct application of incentive | N/a. |

Wholesale water outcome 2: Looking after the environment

Performance commitment 7: Distribution input

Detailed definition of performance measure: The average daily amount (MI/d) of potable water entering the distribution system in a year

Incentive type: Reputational

Performance commitments

| | Unit | Starting level | Committed performance levels | | | | |
|----|------|----------------|------------------------------|---------|---------|---------|---------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| PC | MI/d | 533.97 | 525.48 | 525.06 | 525.77 | 526.79 | 526.39 |

Additional details

| | |
|--|--|
| Necessary detail on measurement units | The average daily amount (MI/d) of potable water entering the distribution system in a year. |
| Frequency of PC measurement and any use of averaging | Performance will be measured and reported annually. |
| Timing and frequency of rewards/penalties | N/a. |
| Form of reward/penalty | N/a. |
| Any other information or clarifications relevant to correct application of incentive | N/a. |

Wholesale water outcome 3: Better information and advice

Performance commitment 8: Per capita consumption

Detailed definition of performance measure: Average per capita consumption between 2015-16 and 2019-20. Per capita consumption is the average amount of water used by each of the company's household consumers each day, measured as litres per head per day (l/h/d)

Incentive type: Financial – reward and penalty

Performance commitments

| | Unit | Starting level | Committed performance levels | | | | |
|------------------|-------|----------------|------------------------------|---------|---------|---------|---------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| PC | l/h/d | 147.2 | | | | | 133.7 |
| Penalty collar | l/h/d | | | | | | 135.7 |
| Penalty deadband | l/h/d | | | | | | 133.7 |
| Reward deadband | l/h/d | | | | | | 133.7 |
| Reward cap | l/h/d | | | | | | 131.7 |

Incentive rates

| Incentive type | Incentive rate (£m/l/h/d/year) |
|----------------|--------------------------------|
| Penalty | 1.0969 |
| Reward | 0.6875 |

Additional details

| | |
|--|--|
| Necessary detail on measurement units | The unit of measurement is post-Maximum Likelihood Estimation weighted average litres per person per day on average over the year. |
| Frequency of PC measurement | Performance will be measured and reported annually |

| | |
|--|--|
| and any use of averaging | and at the end of the AMP period as a five-year average. Annual performance will also be measured and published. |
| Timing and frequency of rewards/penalties | Rewards and penalties apply at the end of the AMP based on performance against the five-year average target. |
| Form of reward/penalty | Revenue adjustment. |
| Any other information or clarifications relevant to correct application of incentive | N/a. |

Wholesale wastewater outcome 1: A reliable wastewater service

Performance commitment 1: Wastewater asset health

Detailed definition of performance measure: Composite measure, consisting of the following components:

- Sewer collapses
- Wastewater treatment works population equivalent compliance
- External flooding – other causes

Incentive type: Financial – penalty only

Performance commitments

| | Unit | Starting level | Committed performance levels | | | | |
|------------------|------|----------------|--|---------|---------|---------|---------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| PC | | | Stable | Stable | Stable | Stable | Stable |
| Penalty collar | | | See individual parameters below (Lower performance level) | | | | |
| Penalty deadband | | | See individual parameters below (higher performance level) | | | | |

Incentive rates and performance levels

| Incentive type | Performance levels | | Incentive rate |
|---------------------------------------|--------------------|--------|----------------------|
| | Lower | Upper | |
| Sewer collapses | 392 | 368 | £56,250 per collapse |
| WWTW population equivalent compliance | 99.8% | 99.9% | £14.95m per 0.1% |
| External flooding (other causes) | 13,004 | 10,974 | £296 per incident |

Additional details

| | |
|--|---|
| Necessary detail on measurement units | Stable performance means that performance for all components of the ODI is better than the upper performance levels. Measurement to follow guidelines as defined for the Ofwat KPIs in 'Key performance indicators – guidance', IN 13/03. |
| Frequency of PC measurement and any use of averaging | Performance will be measured and reported annually. |
| Timing and frequency of rewards/penalties | Penalties apply at the end of the AMP period. Penalties will apply for performance below the upper level (deadband) for all years for all individual parameters. Penalties apply up to and including the lower performance level (collar) for all years for all parameters. |
| Form of reward/penalty | Revenue-based penalty which is to be funded through an equivalent adjustment to the RCV. |
| Any other information or clarifications relevant to correct application of incentive | The components of this performance measure will be assessed individually. An overall penalty will then be imposed against the wastewater asset health measure based on the combined performance against these individual commitments. |

Performance commitment 1a: Category 3 pollution incidents

Detailed definition of performance measure: The total number of category 3 pollution incidents, including transferred assets and excluding private pumping stations

Incentive type: Financial – penalty only

Performance commitments

| | Unit | Starting level | Committed performance levels | | | | |
|--|------|----------------|------------------------------|---------|---------|---------|---------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| | | | | | | | |

| | Unit | Starting level | Committed performance levels | | | | |
|---------------------|--------|----------------|------------------------------|---------|---------|---------|---------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| Pollution incidents | Number | 348 | 285 | 221 | 158 | 158 | 158 |
| Penalty collar | Number | | 453 | 453 | 280 | 280 | 280 |
| Penalty deadband | Number | | 348 | 348 | 175 | 175 | 175 |

Incentive rates

| Incentive type | Incentive rate (£/incident) |
|----------------|-----------------------------|
| Penalty | 20,571 |

Additional details

| | |
|--|--|
| Necessary detail on measurement units | Measurement to follow guidelines as defined for the Ofwat KPIs in 'Key performance indicators – guidance', IN 13/03. |
| Frequency of PC measurement and any use of averaging | Performance will be measured and reported annually. |
| Timing and frequency of rewards/penalties | Penalties apply at the end of the AMP period. Penalties will apply for performance worse than the deadband and up to the collar for all years. |
| Form of reward/penalty | Revenue-based penalty which is to be funded through an equivalent adjustment to the RCV. |
| Any other information or clarifications relevant to correct application of incentive | Because this parameter was subject to comparative assessment it is presented here as a separate PC. |

Performance commitment 2: Internal flooding incidents

Detailed definition of performance measure: The total number of internal flooding incidents (all causes, including private sewers) between 2015-16 and 2019-20

Incentive type: Financial – reward and penalty

Performance commitments

| | Unit | Starting level | Committed performance levels | | | | |
|----------------------|---------------------------------------|----------------|------------------------------|---------|---------|---------|---------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| PC (annual profile) | Number of incidents | 551 | 446 | 436 | 414 | 392 | 382 |
| PC (five year total) | Number of incidents (five year total) | 2,755 | | | | | 2,070 |
| Penalty collar | | | | | | | 2,440 |
| Penalty deadband | | | | | | | 2,215 |
| Reward deadband | | | | | | | 2,000 |
| Reward collar | | | | | | | 1,700 |

Incentive rates

| Incentive type | Incentive rate (£/incident) |
|----------------|-----------------------------|
| Penalty | 75,260 |
| Reward | 72,228 |

Additional details

| | |
|--|---|
| Necessary detail on measurement units | The number of flooding incidents will be produced in accordance with the JR11 regulatory reporting requirements for table 3a and will private sewers. The only incidents that will be excluded are those associated with 'severe' weather conditions. |
| Frequency of PC measurement and any use of averaging | Performance to be measured and reported annually and at the end of the AMP as a five year total. |
| Timing and frequency of rewards/penalties | Rewards and penalties apply at the end of the AMP based on performance against five year total target. |
| Form of reward/penalty | Revenue adjustment. |
| Any other information or clarifications relevant to correct application of incentive | N/a. |

Performance commitment 3: External flooding incidents

Detailed definition of performance measure: The number of external flooding incidents, annually, between 2015-16 and 2019-20

Incentive type: Reputational

Performance commitments

| | Unit | Starting level | Committed performance levels | | | | |
|----|-----------|----------------|------------------------------|---------|---------|---------|---------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| PC | Incidents | 9,694 | 9,694 | 9,694 | 9,694 | 9,694 | 9,694 |

Additional details

| | |
|--|---|
| Necessary detail on measurement units | The number of flooding incidents will be produced in accordance with the JR11 regulatory reporting requirements for table 3a and includes all incidents from all causes. |
| Frequency of PC measurement and any use of averaging | Performance will be measured and reported annually. |
| Timing and frequency of rewards/penalties | N/a. |
| Form of reward/penalty | N/a. |
| Any other information or clarifications relevant to correct application of incentive | This measure overlaps with the 'external flooding – other causes' metric within the overall asset health PC for wastewater. However, this PC is reputational whereas the asset health PC is penalty only. |

Performance commitment 4: Sewer blockages

Detailed definition of performance measure: The number of blockages per km of sewer length, annually, between 2015-16 and 2019-20

Incentive type: Financial – penalty only

Performance commitments

| | Unit | Starting level | Committed performance levels | | | | |
|------------------|------------------|----------------|------------------------------|---------|---------|---------|---------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| PC | Blockages per km | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 |
| Penalty collar | Blockages per km | | 0.65 | 0.65 | 0.65 | 0.65 | 0.65 |
| Penalty deadband | Blockages per km | | 0.59 | 0.59 | 0.59 | 0.59 | 0.59 |

Incentive rates

| Incentive type | Incentive rate (£m/1.00 blockages/km/year) |
|----------------|--|
| Penalty | 16.276 |

Additional details

| | |
|--|--|
| Necessary detail on measurement units | Measurement of performance will follow the guidelines as defined for the Ofwat KPIs in 'Key performance indicators – guidance', IN 13/03. |
| Frequency of PC measurement and any use of averaging | Performance will be measured and reported annually. |
| Timing and frequency of rewards/penalties | Penalties apply at the end of the AMP period. Penalties will apply for every year that the outturn is greater than the deadband, up to the collar- |
| Form of reward/penalty | Revenue adjustment. |
| Any other information or clarifications relevant to correct application of incentive | N/a. |

Performance commitment 5: Odour complaints

Detailed definition of performance measure: The number of customer complaints relating to odour from Portswood and Tonbridge treatment works, annually, between 2015-16 and 2019-20

Incentive type: Financial – penalty only

Performance commitments

| | Unit | Starting level | Committed performance levels | | | | |
|--|------|----------------|------------------------------|---------|---------|---------|---------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| | | | | | | | |

| | | | | | | | |
|------------------|--------|---|---|---|---|----|----|
| PC | Number | 0 | 0 | 0 | 0 | 0 | 0 |
| Penalty collar | Number | | 0 | 0 | 0 | 20 | 20 |
| Penalty deadband | Number | | 0 | 0 | 0 | 0 | 0 |

Incentive rates

| Incentive type | Incentive rate (£m/complaint/year) |
|----------------|------------------------------------|
| Penalty | 0.079 |

Additional details

| | |
|--|---|
| Necessary detail on measurement units | WWTW Compliance is reported by the Environment Agency on MD109. |
| Frequency of PC measurement and any use of averaging | Performance will be measured and reported annually. |
| Timing and frequency of rewards/penalties | Penalties apply at the end of the AMP period. Penalties will apply for 2018-19 and 2019-20 if the out-turn is greater than the deadband, up to the collar. |
| Form of reward/penalty | Revenue adjustment. |
| Any other information or clarifications relevant to correct application of incentive | Only odour complaints from Portswood and Tonbridge WWTWs are included in the measurement of odour complaints for this ODI. This is to protect customers against the non-delivery of the planned odour schemes at these two works. |

Wholesale wastewater outcome 2: Looking after the environment

Performance commitment 6: Wastewater treatment works numeric compliance

Detailed definition of performance measure: Compliance with wastewater treatment works regulations as reported by the Environment Agency on MD109

Incentive type: Financial – penalty only

Performance commitments

| | Unit | Starting level | Committed performance levels | | | | |
|------------------|------|----------------|------------------------------|---------|---------|---------|---------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| PC | % | 98.6 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Penalty collar | % | | 96.8 | 96.8 | 96.8 | 96.8 | 96.8 |
| Penalty deadband | % | | 97.7 | 97.7 | 97.7 | 97.7 | 97.7 |

Incentive rates

| Incentive type | Incentive rate (£m/0.1%/year) |
|----------------|-------------------------------|
| Penalty | 1.661 |

Additional details

| | |
|--|---|
| Necessary detail on measurement units | WWTW Compliance is reported by the Environment Agency on MD109. |
| Frequency of PC measurement and any use of averaging | Performance will be measured and reported annually. |
| Timing and frequency of rewards/penalties | Penalties apply at the end of the AMP period. Penalties will apply for every year that performance is less than the deadband, up to the collar. |
| Form of reward/penalty | Revenue adjustment. |

Any other information or clarifications relevant to correct application of incentive

The following additional requirements apply to the measurement of performance against this commitment:

- Compliance is only required on numeric WRA/UWWTD permits.
- Compliance with NEP4 and NEP5 permits is based on funded schemes against current known standards and not any subsequent revisions following the Final Determination.
- Measurement against this commitment is also based on the 12 month performance from January to December each year between 2015-16 and 2019-20.

Performance commitment 7: Proportion of energy from renewable sources

Detailed definition of performance measure: The proportion of total energy consumption that is from renewable sources

Incentive type: Reputational

| | Unit | Starting level | Committed performance levels | | | | |
|----|------|----------------|------------------------------|---------|---------|---------|---------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| PC | % | 14.5 | | | | | 16.5 |

Additional details

| | |
|--|--|
| Necessary detail on measurement units | The percentage of renewable energy generated out of total operational energy used in the financial year. |
| Frequency of PC measurement and any use of averaging | Performance will be measured and published annually. |
| Timing and frequency of rewards/penalties | N/a. |

| | |
|--|------|
| Form of reward/penalty | N/a. |
| Any other information or clarifications relevant to correct application of incentive | N/a. |

Performance commitment 8: Bathing waters with ‘excellent’ water quality (part 1)

Detailed definition of performance measure: Maintain the number of bathing waters with ‘excellent’ water quality as defined under the revised Bathing Water Directive at the 2014-15 level

Incentive type: Financial – reward and penalty

Performance commitments

| | Unit | Starting level | Committed performance levels | | | | |
|------------------|--------------------------|----------------|------------------------------|---------|---------|---------|---------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| PC | Number of bathing waters | TBC | 54 | 54 | 54 | 54 | 54 |
| Penalty collar | Number of bathing waters | | 42 | 42 | 42 | 42 | 42 |
| Penalty deadband | Number of bathing waters | | 48 | 48 | 48 | 48 | 48 |
| Reward deadband | Number of bathing waters | | 60 | 60 | 60 | 60 | 60 |
| Reward collar | Number of bathing waters | | 66 | 66 | 66 | 66 | 66 |

Note: all figures in the above table will be updated once the bathing water results are published by Defra in 2014-15.

Incentive rates

| Incentive type | Incentive rate (£/bathing water/year) |
|----------------|---------------------------------------|
| Penalty | 291,500 |
| Reward | 246,750 |

Additional details

| | |
|--|---|
| Necessary detail on measurement units | <p>Measurement of performance against the revised Bathing Water Directive which is published by Defra.</p> <p>The measure of 'excellent' water quality is no more than 100 Intestinal Enterococci cfu/ml and 250 Escherchia coli cfu/ml in at least 19 out of 20 samples.</p> <p>Ofwat will confirm PCs, deadbands, caps and collars in 2014-15 once the bathing water quality results are published by Defra.</p> |
| Frequency of PC measurement and any use of averaging | Performance will be measured and reported annually and at the end of the AMP as a five-year total. |
| Timing and frequency of rewards/penalties | Rewards and penalties apply at the end of the AMP based on performance against the annual targets. |
| Form of reward/penalty | Revenue adjustment. |
| Any other information or clarifications relevant to correct application of incentive | <p>The purpose of this component of the ODI is to protect customers against any deterioration in the current level of bathing waters with 'excellent' water quality.</p> <p>Rewards and penalties will apply for performance against Southern Water's 2014-15 level of bathing waters with 'excellent' water quality. Measurement applies only to bathing waters which are not targeted for specific investment under the final determination bathing water clean seas enhancement programme.</p> |

Performance commitment 9: Bathing waters with ‘excellent’ water quality (part 2)

Detailed definition of performance measure: Increase the number of bathing waters with excellent water quality as defined under the revised Bathing Water Directive

Incentive type: Financial – reward and penalty

Performance commitments

| | Unit | Starting level | Committed performance levels | | | | |
|------------------|--------------------------|----------------|------------------------------|---------|---------|---------|---------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| PC | Number of bathing waters | | 0 | 0 | 0 | 0 | 7 |
| Penalty collar | Number of bathing waters | | 0 | 0 | 0 | 0 | 0 |
| Penalty deadband | Number of bathing waters | | 0 | 0 | 0 | 0 | 7 |
| Reward deadband | Number of bathing waters | | 0 | 0 | 0 | 0 | 7 |
| Reward collar | Number of bathing waters | | 7 | 7 | 7 | 7 | 7 |

Incentive rates

| Incentive type | Incentive rate (£/bathing water) |
|----------------|----------------------------------|
| Penalty | 3,640,000 |
| Reward | 246,750 |

Additional details

| | |
|--|--|
| <p>Necessary detail on measurement units</p> | <p>Measurement of performance against the revised Bathing Water Directive which is published by Defra.</p> <p>The measure of 'excellent' water quality is no more than 100 Intestinal Enterococci cfu/ml and 250 Escherchia coli cfu/ml in at least 19 out of 20 samples.</p> |
| <p>Frequency of PC measurement and any use of averaging</p> | <p>Performance will be measured and reported annually and at the end of the AMP as a five-year total.</p> |
| <p>Timing and frequency of rewards/penalties</p> | <p>Rewards and penalties apply at the end of the AMP based on performance against the annual targets.</p> |
| <p>Form of reward/penalty</p> | <p>Revenue adjustment.</p> |
| <p>Any other information or clarifications relevant to correct application of incentive</p> | <p>The purpose of this ODI is to protect customers from the non-delivery of Southern Water's programme to improve seven bathing waters to 'excellent' standard in line with Southern Water's published selection criteria by 2019-20 (see Annex 2 of the company's business plan for details of the selection criteria).</p> <p>Penalties will apply for failure to complete the seven targeted beaches to 'excellent' standard by 2019-20 based on the unweighted application of Southern Water's independently assured selection criteria as described in Southern Water's draft determination representation.</p> <p>Furthermore, the planned bathing waters will be reviewed by the independent Customer Advisory Panel which will confirm whether Southern Water has appropriately applied the bathing water selection criteria.</p> <p>Rewards will apply for the early delivery of the seven targeted bathing waters to 'excellent' standard.</p> |

Performance commitment 10: Bathing waters with ‘excellent’ water quality (part 3)

Detailed definition of performance measure: Estimated scheme costs of £31.5m for our planned bathing water improvements

Incentive type: Financial – penalty only

Performance commitments

| | Unit | Starting level | Committed performance levels | | | | |
|------------------|------|----------------|------------------------------|---------|---------|---------|---------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| PC | £m | N/a | | | | | 31.5 |
| Penalty collar | £m | | | | | | 0 |
| Penalty deadband | £m | | | | | | 24.56 |

Incentive rates

| Incentive type | Incentive rate (£m/£1m/year) |
|----------------|------------------------------|
| Penalty | 0.5 |

Additional details

| | |
|--|---|
| Necessary detail on measurement units | The current estimated cost of delivering the bathing water programme is £31.5m. Once Southern Water has carried out the full scheme investigations, these costs will be re-estimated to determine whether they are materially different from the current expected cost. |
| Frequency of PC measurement and any use of averaging | The estimated costs will be compared once the investigations have been completed during the AMP period. |
| Timing and frequency of rewards/penalties | Penalties will apply in 2019-20. |
| Form of reward/penalty | RCV adjustment. |

Any other information or clarifications relevant to correct application of incentive

This component of the ODI protects customers against any possible windfall gain which could arise due to the current uncertainty around the programme cost of delivering additional bathing waters to 'excellent' standard. This component of the ODI ensures that, if, following the investigations, the actual costs associated with delivery are materially different from the current estimated costs (defined as one standard deviation below the estimated P50 cost of £31.5m, setting the deadband at £24.56m), the difference will be returned to Southern Water's customers through the ODI mechanism.

Once Southern Water has the investigation results, the programme costs will be re-estimated with more informed solution costs. Southern Water will apply the bathing water selection criteria following investigations, and if the cost is less than that FD allowance, Southern Water will calculate the windfall gain and return this to Southern Water's customers through the ODI mechanism.

The PC is an estimated cost of £31.5m for the seven improvement schemes. If the revised estimate following the investigations turns out to be lower than the expected cost, for each £1m below the deadband of £24.56m Southern Water will pay back £0.5m to customers. They will get back the remaining 50% through menu cost performance incentives.

Performance commitment 11: Serious pollution incidents

Detailed definition of performance measure: The number of category 1 and 2 pollution incidents, as reported by the Environment Agency on MD109

Incentive type: Reputational

Performance commitments

| | Unit | Starting level | Committed performance levels |
|--|------|----------------|------------------------------|
|--|------|----------------|------------------------------|

| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
|----|-----------|---------|---------|---------|---------|---------|---------|
| PC | Incidents | 7 | 8 | 6 | 4 | 2 | 0 |

Additional details

| | |
|--|--|
| Necessary detail on measurement units | Measurement of performance will reflect the incidents reported by the Environment Agency on MD109. |
| Frequency of PC measurement and any use of averaging | Performance will be measured and reported annually. |
| Timing and frequency of rewards/penalties | N/a. |
| Form of reward/penalty | N/a. |
| Any other information or clarifications relevant to correct application of incentive | This PC is for serious pollution incidents: category 1 and 2. The asset health sub-measure is for category 3 incidents only. |

Wholesale wastewater outcome 3: Better information and advice

Performance commitment 12: Avoiding blocked drains

Detailed definition of performance measure: The proportion of customers who are aware of measures to avoid blocked drains, measured by surveys

Incentive type: Reputational

Performance commitments

| | Unit | Starting level | Committed performance levels | | | | |
|----|------|----------------|------------------------------|---------|---------|---------|---------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| PC | % | 75 | 75 | 76 | 76 | 77 | 78 |

Additional details

| | |
|--|--|
| Necessary detail on measurement units | Performance to be measured by customer surveys, the first of which was carried out in 2013-14. The target is to improve to 78% by 2019-20 from Southern Water's current estimate of 75%. |
| Frequency of PC measurement and any use of averaging | Performance against this measure will be published annually. |
| Timing and frequency of rewards/penalties | N/a. |
| Form of reward/penalty | N/a. |
| Any other information or clarifications relevant to correct application of incentive | N/a. |

Wholesale wastewater outcome 4: Scheme ODIs

Performance commitment 13: Thanet sewers

Detailed definition of performance measure: Delivery of Thanet sewers scheme to deliver phase 2 statutory obligation (NEP4) by 31-03-2020

Incentive type: Financial –penalty only

Performance commitments

| | Unit | Starting level | Committed performance levels | | | | | |
|------------------|------|----------------|------------------------------|---------|---------|---------|-----------|---------------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | |
| PC | | N/a | | | | | Milestone | Delivered |
| Penalty collar | | | | | | | | Not delivered |
| Penalty deadband | | | | | | | | Not delivered |

Incentive rates

| Incentive type | Incentive rate (£m) |
|------------------------|---------------------|
| Penalty (non-delivery) | 31.208 |
| Penalty (delay) | 0.950 |

Additional details

| | |
|--|---|
| Necessary detail on measurement units | Performance to be measured as pass/fail in each year until completion. |
| Frequency of PC measurement and any use of averaging | Performance will be measured following the expected scheme completion date on 31-03-2020 with a progress milestone at PR19. |
| Timing and frequency of rewards/penalties | Incentives to be determined at PR19 based on the extent of completion and, if relevant, expected date of completion. If improvements not expected to be |

| | |
|--|--|
| | <p>delivered by 31-03-2020 the timing delay penalties will apply for each year's delay until expected completion. If substantive progress towards delivery cannot be demonstrated at this point the full non-delivery penalty will apply.</p> <p>Penalties to be confirmed following the expected scheme completion date on 31-03-2020.</p> |
| Form of reward/penalty | RCV adjustment. |
| Any other information or clarifications relevant to correct application of incentive | <p>The allowed totex for this scheme is £37.6m. The penalty will be calibrated with the totex efficiency sharing rate of 50%, plus 50% of the benefits. Therefore the non-delivery penalty is $(£37.6m \times 50\%) + (24.816 \times 50\%) = £31.208m$.</p> <p>The delay penalties are equal to 50% of annualised costs = £0.950m/year.</p> <p>This scheme is required under the groundwater regulations (WFD daughter directive). The benefits figure has been estimated using the benefit/cost ratio of the regulatory impact assessment of the original Groundwater Directive.</p> |

Performance commitment 14: Woolston STW

Detailed definition of performance measure: Delivery of the Woolston STW scheme in accordance with requirements set out in the National Environment Programme or as agreed with the Environment Agency by 31-03-2020

Incentive type: Financial –penalty only

Performance commitments

| | Unit | Starting level | Committed performance levels | | | | | |
|----|------|----------------|------------------------------|---------|---------|---------|-----------|-----------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | |
| PC | | N/a | | | | | Milestone | Delivered |

| | Unit | Starting level | Committed performance levels | | | | |
|------------------|------|----------------|------------------------------|---------|---------|---------|---------------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| Penalty collar | | | | | | | Not delivered |
| Penalty deadband | | | | | | | Not delivered |

Incentive rates

| Incentive type | Incentive rate (£m for non-delivery) |
|------------------------|--------------------------------------|
| Penalty (non-delivery) | 21.696 |
| Penalty (delay) | 0.900 |

Additional details

| | |
|--|---|
| Necessary detail on measurement units | Performance to be measured as pass/fail in each year until completion. |
| Frequency of PC measurement and any use of averaging | Performance will be measured following the expected scheme completion date on 31-03-2020 with a progress milestone at PR19. |
| Timing and frequency of rewards/penalties | <p>Incentives to be determined at PR19 based on the extent of completion and, if relevant, expected date of completion. If improvements not expected to be delivered by 31-03-2020 the timing delay penalties will apply for each year's delay until expected completion. If substantive progress towards delivery cannot be demonstrated at this point the full non-delivery penalty will apply.</p> <p>Penalties to be confirmed following the expected scheme completion date on 31-03-2020.</p> |
| Form of reward/penalty | RCV adjustment. |
| Any other information or clarifications relevant to correct application of incentive | The allowed totex for this scheme is £36.157m. The penalty will be calibrated with the totex efficiency sharing rate of 50%, plus 50% of benefits. Therefore the penalty is $(£36.157m \times 50\%) + (£7.235 \times 50\% = £21.696m$. |

The delay penalties are calculated as 50% of annualised costs and are equal to £0.900m/year.

Performance commitment 15: Millbrook sludge

Detailed definition of performance measure: Delivery of Millbrook sludge scheme for removal of 6,000 tonnes of dry solids by 31-03-2020

Incentive type: Financial –penalty only

Performance commitments

| | Unit | Starting level | Committed performance levels | | | | |
|------------------|--------|----------------|------------------------------|---------|---------|---------|---------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| PC | Tonnes | N/a | | | | | 6,000 |
| Penalty collar | Tonnes | | | | | | 0 |
| Penalty deadband | Tonnes | | | | | | 6,000 |

Incentive rates

| Incentive type | Incentive rate (£/tonne) |
|----------------|--------------------------|
| Penalty | 1,889 |

Additional details

| | |
|--|--|
| Necessary detail on measurement units | Failure to deliver the scheme by 31-03-2020 will result in a financial penalty of £1,889 per tonne. |
| Frequency of PC measurement and any use of averaging | Performance will be measured following the expected scheme completion date on 31-03-2020, with a progress milestone at PR19. |

| | |
|--|--|
| <p>Timing and frequency of rewards/penalties</p> | <p>Penalties will apply following the expected scheme completion date on 31-03-2020, or earlier if substantive progress toward delivery cannot be demonstrated at PR19.</p> |
| <p>Form of reward/penalty</p> | <p>RCV adjustment.</p> |
| <p>Any other information or clarifications relevant to correct application of incentive</p> | <p>The allowed totex for this scheme is £18.132 million. The penalty will be calibrated with the totex efficiency sharing rate of 50%, plus a 25% uplift to ensure that the company is not indifferent between delivering the scheme and not. Therefore the maximum penalty is £18.132m x 50% x 125% = £11.333 million. The penalty rate per tonne is therefore £11.333m/6,000 = £1,889.</p> |

Household retail outcome 1: Responsive customer service

Performance commitment 1: First time resolution of customer contacts

Detailed definition of performance measure: The proportion of customer contacts resolved first time, as measured by a third party

Incentive type: Reputational

Performance commitments

| | Unit | Starting level | Committed performance levels | | | | |
|----|------|----------------|------------------------------|---------|---------|---------|---------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| PC | % | 80 | Improve | Improve | Improve | Improve | Improve |

Additional details

| | |
|--|--|
| Necessary detail on measurement units | This commitment will be externally measured using an approach which was developed for Southern Water's business plan and was used to measure Southern Water's 2013-14 performance level of around 80%. |
| Frequency of PC measurement and any use of averaging | Performance against this measure will be published annually. |
| Timing and frequency of rewards/penalties | N/a. |
| Form of reward/penalty | N/a. |
| Any other information or clarifications relevant to correct application of incentive | N/a. |

Performance commitment 2: Dealing with customers' individual needs

Detailed definition of performance measure: The proportion of customers agreeing with the statement that we 'dealt with their individual needs and those of their community', measured by surveys

Incentive type: Reputational

Performance commitments

| | Unit | Starting level | Committed performance levels | | | | |
|----|------|----------------|------------------------------|---------|---------|---------|---------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| PC | % | 75.9 | Improve | Improve | Improve | Improve | Improve |

Additional details

| | |
|--|--|
| Necessary detail on measurement units | Performance to be measured by customer surveys, the first of which was carried out in 2013-14. Target is to 'improve' on 2013-14 estimated performance of 75.9%. |
| Frequency of PC measurement and any use of averaging | Performance against this measure will be published annually. |
| Timing and frequency of rewards/penalties | N/a. |
| Form of reward/penalty | N/a. |
| Any other information or clarifications relevant to correct application of incentive | N/a. |

Household retail outcome 2: Better Information and Advice

Performance commitment 3: Awareness of water hardness measures

Detailed definition of performance measure: The percentage of customers with awareness of how to deal with hard water, measured by surveys

Incentive type: Reputational

Performance commitments

| | Unit | Starting level | Committed performance levels | | | | |
|----|------|----------------|------------------------------|---------|---------|---------|---------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| PC | % | 67.1 | Improve | Improve | Improve | Improve | Improve |

Additional details

| | |
|--|--|
| Necessary detail on measurement units | Performance to be measured by customer surveys, the first of which was carried out in 2013-14. Target is to 'improve' on 2013-14 estimated performance of 67.1%. |
| Frequency of PC measurement and any use of averaging | Performance against this measure will be published annually. |
| Timing and frequency of rewards/penalties | N/a. |
| Form of reward/penalty | N/a. |
| Any other information or clarifications relevant to correct application of incentive | N/a. |

Performance commitment 4: Where your money goes

Detailed definition of performance measure: The percentage of customers with awareness of ‘where your money goes’, measured by surveys

Incentive type: Reputational

Performance commitments

| | Unit | Starting level | Committed performance levels | | | | |
|----|------|----------------|------------------------------|---------|---------|---------|---------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| PC | % | 35.1 | Improve | Improve | Improve | Improve | Improve |

Additional details

| | |
|--|--|
| Necessary detail on measurement units | Performance to be measured by customer surveys, the first of which was carried out in 2013-14. Target is to ‘improve’ on 2013-14 estimated performance of 35.1%. |
| Frequency of PC measurement and any use of averaging | Performance against this measure will be published annually. |
| Timing and frequency of rewards/penalties | N/a. |
| Form of reward/penalty | N/a. |
| Any other information or clarifications relevant to correct application of incentive | N/a. |

Performance commitment 5: Billing queries

Detailed definition of performance measure: Number of customer queries related to the understanding of their bills

Incentive type: Reputational

Performance commitments

| | Unit | Starting level | Committed performance levels | | | | |
|----|---------|----------------|------------------------------|----------|----------|----------|---------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| PC | Queries | 49,000 | Decrease | Decrease | Decrease | Decrease | 25,000 |

Additional details

| | |
|--|--|
| Necessary detail on measurement units | Measurement will follow the guidelines from the June Return reporting requirements and definitions manual. Target is to decrease the number of queries from the 2013-14 level of around 49,000 to 25,000 by 2019-20. |
| Frequency of PC measurement and any use of averaging | Performance against this measure will be published annually. |
| Timing and frequency of rewards/penalties | N/a. |
| Form of reward/penalty | N/a. |
| Any other information or clarifications relevant to correct application of incentive | N/a. |

Household retail outcome 3: Affordable bills

Performance commitment 6: Take up of assistance schemes

Detailed definition of performance measure: The number of customers who are receiving support through one of our financial assistance schemes

Incentive type: Reputational

Performance commitments

| | Unit | Starting level | Committed performance levels | | | | |
|----|-----------|----------------|------------------------------|---------|---------|---------|---------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| PC | Customers | 105,100 | 129,500 | 149,900 | 172,300 | 194,700 | 217,100 |

Additional details

| | |
|--|---|
| Necessary detail on measurement units | Measurement of this commitment will be based on the number of customers who are enrolled on one of Southern Water's financial assistance schemes. |
| Frequency of PC measurement and any use of averaging | Performance against this measure will be published annually. |
| Timing and frequency of rewards/penalties | N/a. |
| Form of reward/penalty | N/a. |
| Any other information or clarifications relevant to correct application of incentive | N/a. |

Performance commitment 7: Value-for-money

Detailed definition of performance measure: The proportion of customers who feel they get value-for-money from our services, measured by surveys

Incentive type: Reputational

Performance commitments

| | Unit | Starting level | Committed performance levels | | | | |
|----|------|----------------|------------------------------|---------|---------|---------|---------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| PC | % | 53 | Improve | Improve | Improve | Improve | Improve |

Additional details

| | |
|--|--|
| Necessary detail on measurement units | Performance to be measured by customer surveys, the first of which was carried out in 2013-14. Target is to 'improve' on 2013-14 estimated performance of 53%. |
| Frequency of PC measurement and any use of averaging | Performance against this measure will be published annually. |
| Timing and frequency of rewards/penalties | N/a. |
| Form of reward/penalty | N/a. |
| Any other information or clarifications relevant to correct application of incentive | N/a. |

Performance commitment 8: Service Incentive Mechanism (SIM)

Detailed definition of performance measure: SIM score as defined in Ofwat's SIM guidance, updated in IN13/03

Incentive type: Financial –reward and penalty

Performance commitments

| | Unit | Starting level | Committed performance levels |
|--|------|----------------|------------------------------|
|--|------|----------------|------------------------------|

| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
|------------------|-------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| PC | Score | Ofwat methodology |
| Penalty collar | Score | Ofwat methodology |
| Penalty deadband | Score | Ofwat methodology |
| Reward deadband | Score | Ofwat methodology |
| Reward collar | Score | Ofwat methodology |

Incentive rates

| Incentive type | Incentive rate |
|----------------|-------------------|
| Penalty | Ofwat methodology |
| Reward | Ofwat methodology |

Additional details

| | |
|--|--|
| Necessary detail on measurement units | SIM score as defined in Ofwat's SIM guidance, updated in IN13/03. |
| Frequency of PC measurement and any use of averaging | Annually. |
| Timing and frequency of rewards/penalties | Annual assessment in AMP6. Reward or penalty applied to AMP7 revenue. |
| Form of reward/penalty | Adjustment to revenue at PR19. |
| Any other information or clarifications relevant to correct application of incentive | N/a. |

Outcome delivery and reporting

In the policy chapter A2, we outline a framework against which we have assessed Southern Water’s proposals in relation to outcome delivery and reporting.

The table below summarises Southern Water’s proposed approach to the measurement, reporting and governance of outcomes and our assessment of this approach.

Table AA4.9 Southern Water’s proposals for outcome delivery and reporting

| Southern Water’s proposals | Our assessment |
|--|--|
| <p>Southern Water’s proposals are described in detail in its business plan submission of 27 June 2014:</p> <p>Wholesale water –chapter 2, Test 2, Criteria 2.8, page 452</p> <p>Wholesale wastewater –chapter 3, Test 2, Criteria 2.8, page 359</p> <p>Household retail – chapter 4, Test 2, Criteria 2.8, page 208</p> <p>The company has summarised its approach to reporting performance over 2015-20 as follows:</p> <p>A focus on reporting against the customer promises in our business plan (our PCs), together with a set of asset health performance measures.</p> <p>Targeted reporting of promise delivery at a “community” level; for example “localised” reporting by county, water resource zone or drainage catchment and to relevant special interest groups such as anglers, surfers and parish councils.</p> <p>Enhanced transparency to meet our aspiration to lead the water industry in providing customers with information they want on the financial performance of our business, including how much profit we make, tax we pay, the levels of our shareholder distributions and the amount</p> | <p>In our methodology statement, we set out our expectation that companies should demonstrate that their PCs can be measured and recorded consistently and that they will have the appropriate governance and quality assurance processes in place to achieve this. We also expect companies to be transparent with customers about their performance against their outcomes and commitments.</p> <p>Southern Water has provided sufficient evidence demonstrating the approach it will undertake to ensure the PCs will be measured and reported consistently, and the proposed governance and assurance processes. Therefore, we have accepted the company’s proposal.</p> <p>In time, we may develop further information requirements with regard to outcomes, as we review and change current requirements relating to performance indicators and each company’s annual risk and compliance statement.</p> |

| Southern Water's proposals | Our assessment |
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| <p>of cost efficiency we deliver.</p> <p>Enhancing our internal assurance processes by commissioning independent, external assurance to provide public certification of the accuracy and reliability of our business performance reporting.</p> <p>Strengthening our customer advisory group to build on the success of our CCG. We will launch a new Customer Advisory Panel with the role of providing independent scrutiny and challenge on our performance. We want the Customer Advisory Panel to be recognised by stakeholders and customers as a model for consumer representation in the water industry.</p> | |

Ofwat (The Water Services Regulation Authority) is a non-ministerial government department. We are responsible for making sure that the water sector in England and Wales provides customers with a good quality and efficient service at a fair price.



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