

December 2014

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



OFWAT

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Overview

This appendix sets out the details of the final determination of price controls that are specific to Dŵr Cymru. 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 Welsh 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 – Dŵr Cymru’](#) (the ‘draft determination’ for Dŵr Cymru) on 30 May 2014, one of two ‘early determinations’ ahead of the August deadline. This meant that, compared to the other non-enhanced companies, the company benefited because it has had greater certainty and been able to focus on delivering its plan.

But Dŵr Cymru is not an enhanced company. This means its final determination is subject to any adjustments we considered necessary in light of any additional evidence available to us. In this respect, Dŵr Cymru has been treated in the same way as the other non-enhanced companies – we call this ‘equivalence of treatment’ between companies that are not given ‘enhanced’ status.

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, Dŵr Cymru’s proposals have evolved 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. Its revised business plan, which sought to close the gaps we identified during the RBR, included reduced totex proposals for both water and wastewater; contained sufficient evidence for us to support a doubtful debt adjustment to the cost to serve retail household customers; and accepted our risk and reward guidance.

There were only a limited number of areas where we considered it necessary to intervene to protect the interests of consumers in the draft determination. In August we signalled that we would update Dŵr Cymru’s draft determination to include amended performance commitments. This reflected the findings of our comparative assessments of outcome performance commitments and delivery incentives common to companies across the sector.

The company’s representation on the draft determination focused mainly on interventions on:

- some of its outcomes, with a focus on interruptions to supply (where the company disagreed with our draft determination intervention but proposed performance levels that were a significant improvement on its original levels) and customer acceptability of drinking water;
- adjustments to costs within the retail controls;
- an adjustment to recognise poor performance in 2010-15; and
- arguing against a reduction to the allowed return below the level assumed in the draft determination.

We also received representations from the CCG, the Consumer Council for Water (CCWater) and Natural Resources Wales (NRW). Each was broadly supportive of our determination, but raised some specific concerns, for example, in relation to our assessment of some outcomes (the CCG and NRW) and the adjustments to retail costs for doubtful debts (CCWater).

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

- Introducing a reward for its water supply interruptions, though Dŵr Cymru will still need to significantly improve over the period to reach upper quartile performance and then earn this reward.
- Reducing the size of the downwards adjustment (or shortfall) we made to reflect some aspects of performance in 2010-15.
- Making an adjustment to the company's average cost to serve (ACTS) to reflect its bad debt management costs (which was in addition to the draft determination adjustment we made for doubtful debt costs).
- Following further updated information, the introduction of an efficiency challenge for non-household retail costs.
- In line with all non-enhanced companies, reducing 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 summarise our final determination for Dŵr Cymru in section A1: 'Final determination – at a glance'.

The remainder of this document sets out our final determination in more detail¹ and is then 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.

As we explained in our final methodology statement, these separate 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.

Our approach to the final determination for Dŵr Cymru reflects the policy position of the Welsh government and the fact that those customers in Wales using less than 50 Ml of water a year will not be able to choose their supplier during the next five years. Most non-household customers will not benefit from the protection to service levels and prices that a competitive market will provide to equivalent customers in England. We will continue to need service and price protection as well as different remuneration to investors for risks. Our final determinations for companies operating wholly or mainly in Wales therefore include a non-household service incentive mechanism (SIM) and a non-household cost efficiency challenge (if appropriate) to provide protection for customers. They also take into account the lower level of risk these companies are exposed to when determining remuneration to investors.

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

- the responses that we have received to our draft determinations 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;

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.

- 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, the assumptions we have made to arrive at the allowed revenue for each price control.

Implementing these price controls

Dŵr Cymru 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 Dŵr Cymru’s licence and the Water Industry Act 1991. We consider that Dŵr Cymru must act in an economic and efficient manner in delivering all of its obligations.

Policy chapter A1 sets out the milestones leading up to 1 April 2015 that will ensure effective business plan delivery. These cover menu choices, charges approval, reporting and assurance requirements during 2015-20, and 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 FD assumption on the cost sharing rate and the rate associated with their final menu choice.

This price determination sets out the allowed revenues that Dŵr Cymru can recover from its customers in the period 2015-20. Dŵr Cymru 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 their charges schemes.

A1 Final determination – at a glance

This chapter provides a summary of the final determination for Dŵr Cymru. It summarises what the final determination will mean for customers, with respect to the average bills they will pay and the outcomes that the company will deliver in return. For the company, it covers its allowed costs and revenues, return on regulatory equity 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.

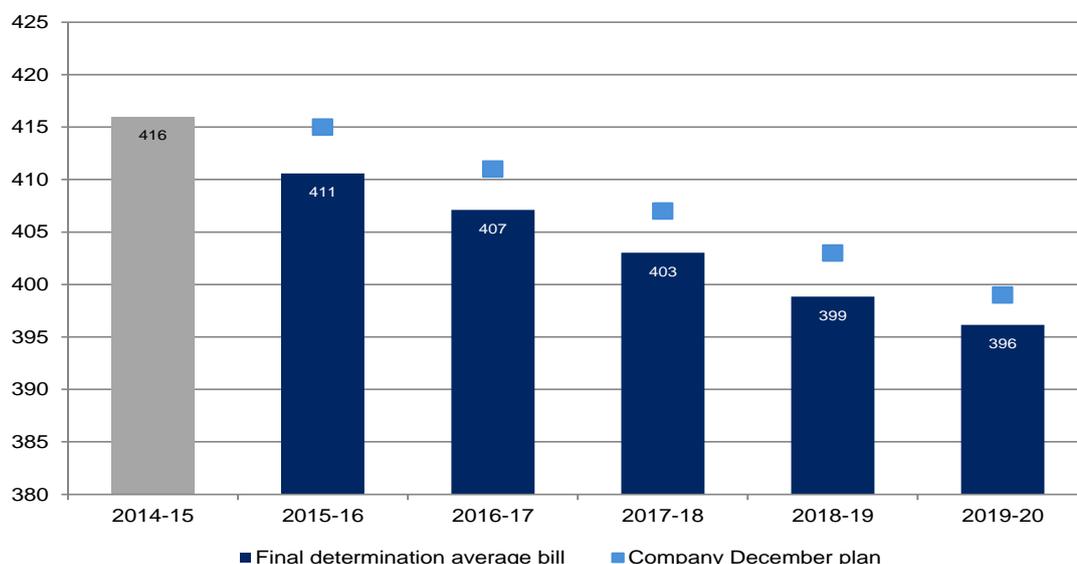
Combined average household bill (£)

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 £396, which is 5% lower than current average bill levels (of £416).

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 £19 for the average customer over the 2015-20 period.

Figure A1.1 Average bills



Note: The comparative bills from ‘company 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. As a consequence 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 Dŵr Cymru

Dŵr Cymru has committed to delivering outcomes which reflect its customers’ views. These are supported by 28 associated performance commitments which identify the company’s committed level of performance under each outcome. For 15 of these performance commitments the company is subject to associated financial ODIs whereby it will incur a penalty for performance worse than its commitments, but for some can earn a reward for performance better than its commitments during the period from 2015 to 2020.

The table below sets out Dŵr Cymru’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 performance commitments associated with these outcomes are set out in annex 4.

Wholesale water	Wholesale wastewater
Safe drinking water Protecting our environment Responding to climate change Excellent customer service Affordable prices Asset stewardship	Protecting our Environment Responding to Climate Change Excellent Customer Service Affordable prices Asset stewardship

Household retail	Non-household retail
Excellent customer service Affordable prices	Excellent customer service Affordable prices

Allowed costs and revenue for Dŵr Cymru

The table below shows the wholesale totex we have allowed over the period from 2015 to 2020. The final determination allows Dŵr Cymru to receive revenues of £3,343m. 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 £44.1 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.

Under our ‘equivalence of treatment’ principle, the company is subject to our reduction in the allowed return to reflect the reduction in the cost of new debt since January. The company is also subject to changes in our cost allowances for wholesale and retail. Changes in these areas are reflected in table below.

Wholesale	Water	Wastewater
Totex 2015-20 total (£m)	1,234.2	1,358.1
Allowed weighted average cost of capital (%)	3.60%	3.60%
Allowed wholesale revenue 2015-20 (£m)	1,321.1	1,749.0
Retail	Household	Non-household
Cost allowance – 2015-20 total (£m)	242.9	
Margin (%)	1.00%	1.23%
Retail allowed revenue (£m)	272.6	44.1

Note: 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 – this is consistent throughout this final determination unless otherwise stated.

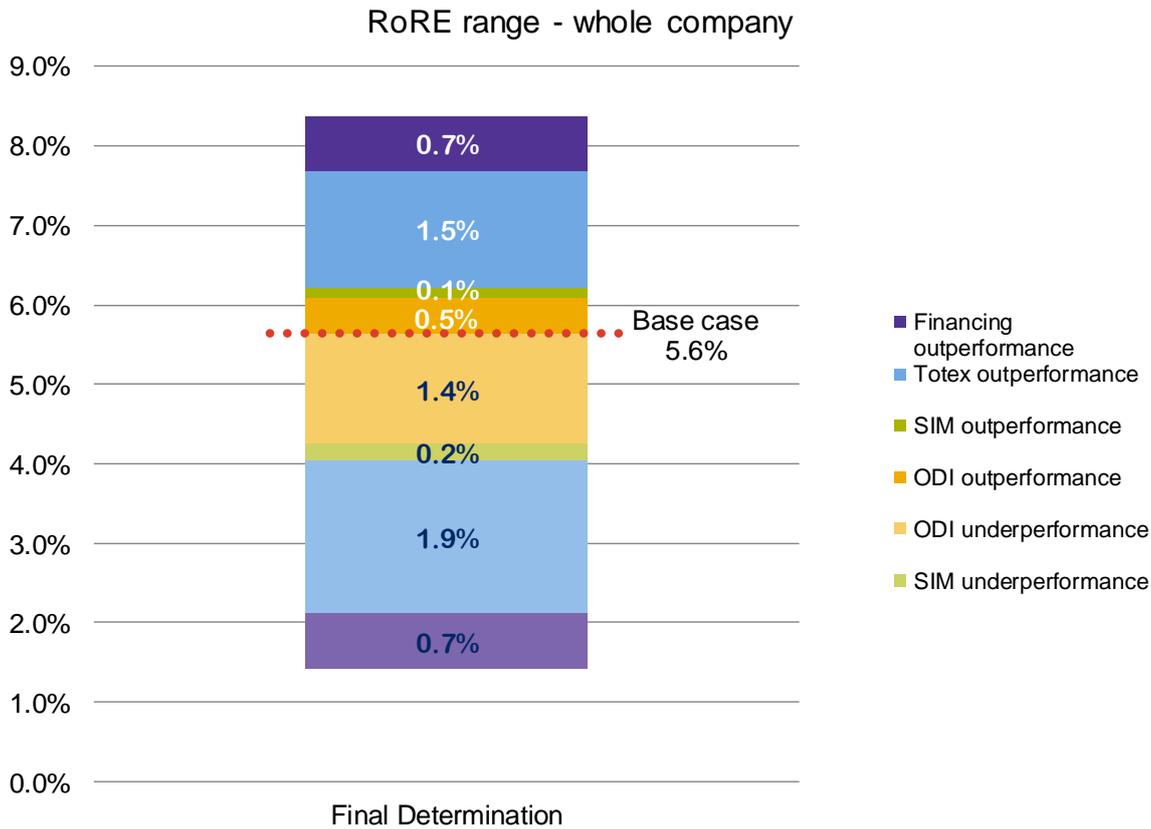
RoRE ranges – appointee

Dŵr Cymru 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 outcome delivery incentives (ODIs), total expenditure (totex) performance, financing and the service incentive

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 weighted average cost of capital (WACC).

mechanism (SIM). We note that Dŵr Cymru’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.

Figure A1.2 RoRE range



Source: Our calculations based on information from Dŵr Cymru

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

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.

Ahead of our draft determination we sought additional assurance from Dŵr Cymru that its plan was financeable on the basis of a notional and an actual structure. The company provided this assurance.

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 Dŵr Cymru to be financeable on a notional basis.

Financial ratios for notional company	Ofwat calculation (average 2015-20)
Cash interest cover (ICR)	2.54
Adjusted cash interest cover ratio (ACICR)	1.59
Funds from operations (FFO)/debt	6.97%
Retained cash flow/debt	4.41%
Gearing	62.52%
Dividend cover (profit after tax/dividends paid)	0.19
Regulatory equity/regulated earnings for the regulated company	17.95
RCV/earnings before interest, taxes, depreciation and amortisation (EBITDA)	14.13

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 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. Under our 'equivalence of treatment' principle the company can be subject to same range of interventions as companies who received their draft determination in August.

Outcomes	Wholesale costs
<ul style="list-style-type: none"> • Cap: We have imposed an overall cap and collar on ODIs of +/-2% of RoRE. • Comparative assessment: We updated our comparative assessment and associated interventions on performance commitments, deadbands, collars and caps. We continue to intervene to set a committed performance level for supply interruptions to deliver upper quartile performance, but we also included a company specific financial reward for the supply interruptions incentive. These interventions are consistent with 'equivalence of treatment'. • Company specific assessment: We adjusted the company's penalties, or introduced a penalty, for 	<ul style="list-style-type: none"> • The company proposed wholesale water totex of £1,240m in its plan, which is £4m above our final determination threshold of £1,236 m. Its proposed wholesale wastewater totex of £1,329m was £41m below our threshold of £1,370m. • These amounts are unchanged from the draft determination.

<p>three performance commitments, but also accepted a proposed reward for one. We included transferred assets for two wastewater commitments.</p>	
<p>Retail</p>	<p>Reconciling 2010-15 performance</p>
<ul style="list-style-type: none"> • We did not accept the company’s proposed input price pressure adjustment for 2013-15, but we have used the 2013-14 price base for setting household and non-household retail price controls. • Based on additional evidence submitted by the company, we made an adjustment to the company’s household retail cost to serve to reflect the debt management costs the company faces. But, we reduced the value of the proposed adjustment by £0.3m. • We accepted the company’s proposed re-allocation of costs between metered and unmetered and household and non-household, but not its proposed reallocation of costs and margins within non-household retail. • We applied an efficiency challenge to non-household retail costs. 	<ul style="list-style-type: none"> • We changed the company’s proposed revenue adjustments by £0.4m (in the company’s favour) and its proposed regulatory capital value (RCV) adjustment by £23.9 m (in customers’ favour) • We have applied a £12.6m serviceability shortfall to wholesale water for unplanned interruptions to supply.
<p>Risk and reward</p>	<p>Financeability and affordability</p>
<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%. This intervention is consistent with ‘equivalence of treatment’. 	<ul style="list-style-type: none"> • We did not intervene in this area, but corrected two modelling errors contained in the draft determination.

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 determination. 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’](#) (the ‘policy chapter A8’).

Table A2.1 lists the representations we have received that are specific to Dŵr Cymru’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 Dŵr Cymru

Area	Company-specific representations	Detailed commentary in this company-specific appendix
Outcomes, performance commitments and incentives	Dŵr Cymru CCG CCWater	Annex 4
Outcome delivery and reporting	None	Annex 4
Calculating allowed wholesale water expenditure	None	Section A2.3.1 and Annex 1

Area	Company-specific representations	Detailed commentary in this company-specific appendix
Calculation of revenues: pay as you go (PAYG) and RCV run-off	None	Section A2.3.2 and A6.5
Cost of capital	Dŵr Cymru CCWater	Section A2.3.3
Reconciling 2010-15 performance	Dŵr Cymru	Annex 3
Uncertainty mechanisms	None	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. Dŵr Cymru has developed and committed to delivering outcomes which reflect its customers' views. These are supported by specific performance commitments 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 with input from its CCG. The CCG's role was to challenge how well the company's outcomes, performance commitments 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 performance commitments proposed by each non-enhanced company for wholesale water has focused on:

- comparative assessments where it was possible to compare performance commitments 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;

- a company specific assessment to ensure that the performance commitments proposed by each company are challenging, appropriately incentivised and supported by customer engagement; and
- the overall cap and collar we are applying on ODIs for 2015-20 that limits total rewards and penalties.

We summarise the outcomes, performance commitments and ODIs for the wholesale water control for Dŵr Cymru in table A2.2 below.

For some performance commitments 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 assessments or company specific assessment.

Under our ‘equivalence of treatment’ principle, the company is subject to:

- the overall cap and collar we are applying on ODIs for 2015-20 that limits total rewards and penalties; and
- changes we have made to outcomes following detailed comparisons of similar outcome proposals put forward by companies (that is, our comparative assessments).

The cap and collar will apply in line with the approach set out in policy chapter A2.

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

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

Company proposal			Intervention
Outcome	Performance commitment	Incentive type	
Safe drinking water	Safety of drinking water – % of compliant samples	Financial – reward and penalty	Comparative assessment – We confirm our interventions at draft determination to adopt a more demanding performance commitment level; change the performance measurement period to annual; change the penalty to a unit rate and remove the proposed rewards. 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	
	Customer acceptability (drinking water) – contacts per 1,000 population	Reputational	Comparative assessment – We confirm our interventions at draft determination to introduce a more demanding performance commitment level, a penalty (and associated deadbands and collars) and change the performance measurement period to annual. Our revised assessment of upper quartile levels and deadbands has led to minor changes as set out in annex 4. We have also accepted the company’s case for adding a reward to this incentive.

Company proposal			Intervention
Outcome	Performance commitment	Incentive type	
	Reliability of supply – minutes lost per customer per year	Reputational	<p>Comparative assessment – We confirm our interventions at draft determination to introduce a more demanding performance commitment level and a penalty (and associated deadbands and collars). Our revised assessment of upper quartile levels and deadbands has led to minor changes as set out in annex 4.</p> <p>We have also accepted the company’s proposed penalty rate and introduced a company specific reward – this is in response to a company specific factor that Dŵr Cymru set out in its representation.</p>
Protecting our environment	Abstraction of water for use – % compliance with abstraction licences	Reputational	No intervention
Responding to climate change	Carbon footprint – GWh of renewable energy generated	Reputational	No intervention

Company proposal			Intervention
Outcome	Performance commitment	Incentive type	
Excellent customer service	SIM	Financial – reward and penalty	No intervention
	‘At risk’ customer services – number of customers who have experienced poor service	Reputational	No intervention
	Earning the trust of customers – % of customers surveyed that say they trust the company	Reputational	No intervention
Affordable prices	Affordable bills – annual increase	Reputational	No intervention
Asset stewardship	Asset serviceability	Financial –penalty only	No intervention
	Leakage	Financial –penalty only	Company specific assessment: We confirm our draft determination intervention to change the penalty to a unit rate and increase the maximum penalty. We have also accepted the company’s case for adding a reward to this incentive.

Company proposal			Intervention
Outcome	Performance commitment	Incentive type	
	Asset resilience – % of critical assets not meeting standards	Financial – penalty only	Company specific assessment: We confirm our draft determination to change the maximum annual penalty, penalty rate to variable. We have also changed the penalty to a variable one and not accepted the company's proposed reward.

A2.2.2 Outcome delivery and reporting

Dŵr Cymru’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.

Following representations, the company’s proposed wholesale water totex is £1,240 million over 2015-20 (versus £1,257 million in its December plan). This is 0.3% above the final determination threshold (post additions) of £1,236million.

The wholesale water allowed expenditure for Dŵr Cymru is detailed in table A2.3 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 A2.3 Wholesale water allowed expenditure (£ million)

	2015-16	2016-17	2017-18	2018-19	2019-20	Total 2015-20
Final determination cost threshold						1,236.2
Costs excluded from menu	8.8	8.8	8.8	8.8	8.8	44.0
Menu cost baseline ¹	246.5	243.0	239.2	233.9	229.7	1,192.2
Company’s view of menu costs ²						1,197.6

	2015-16	2016-17	2017-18	2018-19	2019-20	Total 2015-20
Implied menu choice						100.4
Allowed expenditure from menu	246.7	243.2	239.5	234.1	230.0	1,193.6
Costs excluded from menu	8.8	8.8	8.8	8.8	8.8	44.0
Total allowed expenditure ³	255.5	252.0	248.3	242.9	238.8	1,237.6
Less pension deficit repair allowance	0.7	0.7	0.7	0.7	0.7	3.3
Totex for input to PAYG	254.9	251.4	247.6	242.3	238.1	1,234.2

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 A2.4 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 A2.5 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 A2.4 Dŵr Cymru's wholesale water PAYG rates

	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Totex (£m)	254.9	251.4	247.6	242.3	238.1	1,234.2
PAYG (%)	68.7%	68.9%	69.3%	70.3%	71.0%	69.6%
Resulting PAYG (£m)	175.0	173.2	171.6	170.2	169.1	859.2

Table A2.5 Dŵr Cymru’s wholesale water RCV run-off (£ million)

	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Run-off of 2015 RCV	48.8	47.1	45.6	44.0	42.5	228.1
RCV run-off of totex additions	1.3	4.0	6.6	9.1	11.5	32.5
Total RCV run-off	50.1	51.2	52.2	53.1	54.0	260.6

Note: The figures in this table reflect a run-off rate of 3.37% for the RCV as at 31 March 2015 and 30 years for the totex additions to the RCV over 2015-20.

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. The RCV is calculated as the RCV at the start of the period plus totex that is not funded on a PAYG basis minus RCV run-off (or regulatory depreciation).

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. In 'Setting price controls for 2015-20 –risk and reward guidance' (our 'risk and reward guidance') we set out a single industry cost of capital for both wholesale water and wastewater services based on market evidence, which at the time was 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 for the cost of new debt we have set the wholesale cost of capital at 3.6%.

Under our 'equivalence of treatment' principle the company is subject to this reduction in the wholesale cost of capital. We note that this is consistent with a representation we received from CCWater, which suggested that we should apply any reduction in the allowed return to companies that received their draft determinations in May.

This results in a return on capital of £272 million over 2015-20.

Table A2.6 shows our calculation of the opening RCV at 1 April 2015 taking account of the adjustments for 2010-15 performance discussed in section A2.3.4 below. The average RCV, set out in table 2.7 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 A2.4 and table A2.5 above.

Table A2.6 Dŵr Cymru’s wholesale water opening RCV (£ million)

	2014-15
Closing RCV 31 March 2015	1,288.6
Land sales ¹	0.3
Adjustment for actual expenditure 2009-10 ²	13.7
Adjustment for actual expenditure 2010-15 ³	164.2
Net adjustment from logging up and logging down ^{3,4}	-6.3
Adjustment for shortfalls ^{3,4}	0.0
Adjustment for serviceability shortfalls ⁵	-12.6
Other adjustments ⁶	0.0
Opening RCV 1 April 2015	1,447.8

Notes:

1. Land sales adjustment is set out in table AA3.18.
2. 2009-10 actual expenditure adjustment is set out in table AA3.18.
3. A component of the capital expenditure incentive scheme (CIS) adjustment as set out in table AA3.16.
4. The net adjustment from the change protocol is set out in table AA3.7.
5. The serviceability shortfall adjustment is set out in table AA3.11.
6. Other RCV adjustments are set out in table AA3.18.

Table A2.7 Dŵr Cymru’s wholesale water return on RCV (£ million)

	2015-16	2016-17	2017-18	2018-19	2019-20
Opening RCV	1,447.8	1,477.6	1,504.6	1,528.4	1,547.3
RCV additions (from totex)	79.9	78.1	76.0	72.0	69.0
Less RCV run-off	50.1	51.2	52.2	53.1	54.0
Closing RCV	1,477.6	1,504.6	1,528.4	1,547.3	1,562.3
Average RCV (year average)	1,462.7	1,491.1	1,516.5	1,537.8	1,554.8
Return on capital	52.7	53.7	54.6	55.4	56.0

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 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 water services to reconcile performance in 2010-15. We have intervened and, as a result, the revenue adjustments for wholesale water have changed from -£30.7 million to -£30.8 million. We summarise these interventions in table A2.8 below. The main changes we have made in the final determination in reconciling the company's 2010-15 performance result from our reduction in the serviceability shortfall for unplanned interruptions and the change in capital expenditure incentive scheme (CIS) methodology in relation to using the post-tax cost of capital as the discount rate when calculating future revenue adjustments. The impact on the opening RCV of 2010-15 adjustments is shown in table A2.6 and we discuss our interventions in this area further in annex 3.

When making this final determination 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 CIS, 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 A2.8 Dŵr Cymru’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 have included our view of the company’s SIM reward, which we have calculated as 0.2%. Our intervention increased revenue by £1.4 million.	1.6	3.0	3.0
RCM	<p>We have intervened in the following areas:</p> <ul style="list-style-type: none"> • used the company’s May 2014 tables; • corrected data inconsistencies related to the number of households billed; • used our view of FD09 assumptions; and • corrected inconsistencies between outturn financial year average RPI in the company’s submission. <p>Combined, our interventions reduced revenue by £0.6 million compared with the company’s revised business plan.</p>	18.2	17.6	17.6
Opex incentive allowance (OIA)	There are no interventions in this area.	0.0	0.0	0.0
Capital expenditure incentive scheme (CIS)	As for all companies, 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	-50.5	-52.9	-51.3

Area of intervention	Intervention	Total revenue adjustment 2010-15 (post intervention)		
		Company view	Draft determination	Final determination
	<p>adjustment in the 2010-15 period.</p> <p>In carrying out our assessment, we have included our view of the applicable change protocol amounts and used the inflation assumptions from table A9.</p> <p>Combined, our interventions reduced revenue by £0.8 million compared with the company's revised business plan.</p>			
Other adjustments	There are no interventions in this area.	0.0	0.0	0.0

A2.3.5 Calculation of allowed revenue

We set out the calculation of the allowed revenue for Dŵr Cymru's wholesale water control in table 2.9.

Overall, Dŵr Cymru's wholesale water revenue allowance will be £263.0 million in 2015-16, increasing by 0.9% to £265.4 million in 2019-20.

Table A2.9 Dŵr Cymru's wholesale water allowed revenue (£ million)

	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Totex	254.9	251.4	247.6	242.3	238.1	1,234.2
PAYG rate (%)	68.7%	68.9%	69.3%	70.3%	71.0%	
Totex additions to the RCV	79.9	78.1	76.0	72.0	69.0	375.0
RCV (year average)	1,462.7	1,491.1	1,516.5	1,537.8	1,554.8	
Wholesale allowed revenue build up:						
PAYG ¹	175.6	173.9	172.3	170.9	169.8	862.5
Return on capital	52.7	53.7	54.6	55.4	56.0	272.3
RCV run-off	50.1	51.2	52.2	53.1	54.0	260.6
Tax ²	0.0	0.0	0.0	0.0	0.0	0.0
Income from other sources ^{3,4}	-15.2	-15.2	-15.2	-15.2	-15.3	-76.2
Reconciling 2010-15 performance	-6.2	-6.2	-6.2	-6.2	-6.2	-30.8
Ex ante additional menu income	-0.1	-0.1	-0.1	-0.1	-0.1	-0.7
Wholesale allowed revenue adjustments:						

	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Capital contributions from connection charges and revenue from infrastructure charges	6.1	6.4	6.7	6.9	7.2	33.4
Final allowed revenues	263.0	263.6	264.2	264.8	265.4	1,321.1

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 section A3.3 in policy chapter A3.

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 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.

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 A2.10 below, we set out Dŵr Cymru's proposed wholesale water uncertainty mechanisms and our final assessment of these proposals.

Table A2.10 Dŵr Cymru’s proposals for wholesale water uncertainty mechanisms

Assessment at draft determination	Our final assessment
<p>In the draft determination we adjusted the company’s proposed sharing rate for its proposed uncertainty mechanism on water business rates from 80:20 to 75:25 (customer:company).</p>	<p>For our final determination we confirm the uncertainty mechanism included in our draft determination.</p> <p>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.</p>
<p>Natural Resources Wales saw a change mechanism as necessary to permit the management of present and future statutory obligations. It will be working with the company to develop a suitable mechanism.</p>	<p>No change to the draft determination position. This is because the company has not proposed an uncertainty mechanism for new statutory requirements; we have not allowed such a mechanism for other companies in our draft determinations; and Natural Resources Wales has not provided new evidence why the uncertainty mechanism meets our criteria of materiality, controllability, company specific protection and consumer interests.</p> <p>This does not affect the company’s responsibility to meet all statutory obligations. The final determination provides funding for the company for the 2015-20 period and it is the company’s responsibility to manage any uncertainty. We note that there are a range of existing mechanisms available to companies to manage uncertainty, including:</p> <ul style="list-style-type: none"> • totex sharing menu; • interim determination of K (IDoK’s); and • substantial favourable effects and substantial adverse effects clauses in Condition B of the licence.

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 determination. 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 Dŵr Cymru'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 Dŵr Cymru

Area	Company-specific representations	Detailed commentary in this company-specific appendix
Outcomes, performance commitments and incentives	Dŵr Cymru CCG CCWater (NRW)	Annex 4
Outcome delivery and reporting	None	Annex 4
Calculating allowed wholesale water expenditure	None	Section 3.3.1 and Annex 1

Area	Company-specific representations	Detailed commentary in this company-specific appendix
Calculation of revenues: PAYG and RCV run-off	None	Section A3.3.2 and A6.5
Cost of capital	Dŵr Cymru CCWater	Section A3.3.3
Reconciling 2010-15 performance	Dŵr Cymru	Annex 3
Uncertainty mechanisms	None	Section A3.4

A3.2 Outcomes, performance commitments and incentives

In 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, performance commitments 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 performance commitments proposed by each non-enhanced company for wholesale wastewater has focused on a comparative assessment of outcomes, a company specific assessment and the overall cap and collar.

We summarise the outcomes, performance commitments and ODIs for the wholesale wastewater control for Dŵr Cymru in table A3.2 below.

For some performance commitments 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 assessments or company specific assessment.

Under our 'equivalence of treatment' principle, the company is subject to:

- the overall cap and collar we are applying on ODIs for 2015-20 that limits total rewards and penalties; and
- changes we have made to outcomes following detailed comparisons of similar outcome proposals put forward by companies (that is: our comparative assessment).

The cap and collar will apply in line with the approach set out in policy chapter A2.

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

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

Company proposal			Intervention
Outcome	Performance commitment	Incentive type	
Protecting our environment	Treating Used Water – % compliance of WWTW	Reputational	Company specific assessment: We have increased the performance commitment level to 100% compliance
	Preventing pollution – number of incidents	Financial – reward and penalty	Comparative assessment: We confirm our interventions at draft determination to change the performance commitment level (and associated caps, collars and deadbands) and the measurement period to annual. Our revised assessment of upper quartile levels and deadbands has led to minor changes as set out in annex 4. We have also accepted the company’s case for adding a reward to this incentive, though this does not apply to category 1 or 2 incidents.

Company proposal			Intervention
Outcome	Performance commitment	Incentive type	
Responding to climate change	Adapting to climate change – no of properties covered by surface water removal schemes	Reputational	Company specific assessment: We confirm our draft determination to introduce a penalty (and associated caps, collars and deadbands). We have also corrected an error in the penalty collar.
	Carbon footprint – GWh of renewable energy generated	Reputational	No intervention
Best in class customer service	SIM	Financial – reward and penalty	No intervention
	'At risk' customer services – number of customers who have experienced poor service	Reputational	Company specific assessment: We confirm our draft determination intervention to include contacts and flooding from transferred assets in the description of the measure.

Company proposal			Intervention
Outcome	Performance commitment	Incentive type	
	Sewer flooding – properties flooded in the year	Financial – reward and penalty	Comparative assessment: We confirm our draft determination intervention to measure performance annually and reduce the reward rate, but we have accepted the company’s proposed performance profile (the company is currently performing at the upper quartile level in this area). Our revised assessment of upper quartile levels and deadbands has led to minor changes as set out in annex 4.
	Earning the Trust of Customers – % of customers surveyed that say they trust the company	Reputational	No intervention
Affordable prices	Affordable bills – annual increase	Reputational	No intervention

Company proposal			Intervention
Outcome	Performance commitment	Incentive type	
Asset stewardship	Asset serviceability	Financial –penalty only	Company specific assessment: We confirm our draft determination intervention to include contacts and flooding from transferred assets in the description of the measure.
	Asset resilience – % of critical assets not meeting standards	Financial – penalty only	Company specific assessment: We confirm our draft determination intervention to increase the maximum penalty. We have also changed the penalty to a variable one and not accepted the company’s proposed reward.

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.

Following representations, the company proposed wholesale wastewater totex of £1,329 million over 2015-20 (versus £1,338 million in its December plan). This is £41m (3%) below the final determination threshold (post additions) of £1,370 million.

The wholesale wastewater allowed expenditure for Dŵr Cymru is detailed in table A3.3 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 A3.3 Wholesale wastewater allowed expenditure (£ million)

	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Final determination cost threshold						1,370.3
Costs excluded from menu	0.4	0.4	0.4	0.4	0.4	2.1
Menu cost baseline ¹	282.5	279.6	274.8	267.9	263.4	1,368.2
Company's view of menu costs ²						1,327.7
Implied menu choice						97.0
Allowed expenditure from menu	280.4	277.6	272.8	265.9	261.4	1,358.1
Costs excluded	0.4	0.4	0.4	0.4	0.4	2.1

	2015-16	2016-17	2017-18	2018-19	2019-20	Total
from menu						
Total allowed expenditure ³	280.8	278.0	273.2	266.3	261.9	1,360.2
Less pension deficit repair allowance	0.4	0.4	0.4	0.4	0.4	2.1
Totex for input to PAYG	280.4	277.6	272.8	265.9	261.4	1,358.1

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 A3.4 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 A3.5 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 A3.4 Dŵr Cymru's wholesale wastewater PAYG rates

	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Totex (£m)	280.4	277.6	272.8	265.9	261.4	1,358.1
PAYG (%)	59.1%	57.8%	56.8%	56.3%	55.2%	57.0%
Resulting PAYG (£m)	165.6	160.3	154.9	149.6	144.3	774.7

Table A3.5 Dŵr Cymru's wholesale wastewater RCV run-off (£ million)

	2015-16	2016-17	2017-18	2018-19	2019-20	Total
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	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Run-off of 2015 RCV	71.2	69.6	68.0	66.5	65.0	340.2
RCV run-off of totex additions	1.3	3.9	6.6	9.2	11.8	32.8
Total RCV run-off	72.5	73.5	74.6	75.7	76.8	373.1

Note: The figures in this table reflect a run-off rate of 2.26% for the RCV as at 31 March 2015 and 44 years for the totex additions to the RCV over 2015-20.

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.

Under our ‘equivalence of treatment’ principle the company is subject to this reduction in the wholesale cost of capital. We note that this is consistent with a representation we received from CCWater, which suggested that we should apply any reduction in the allowed return to companies that received their draft determinations in May.

A wholesale cost of capital of 3.6% results in a return on capital of £586.2 million over 2015-20.

Table A3.6 shows our calculation of the opening RCV at 1 April 2015 taking account of the adjustments for 2010-15 performance discussed in section A3.2.4 below. The average RCV, set out in table A3.7 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 A3.4 and table A3.5 above.

Table A3.6 Dŵr Cymru’s wholesale wastewater opening RCV (£ million)

	2014-15
Closing RCV 31 March 2015	2,989.4
Land sales ¹	0.7
Adjustment for actual expenditure 2009-10 ²	39.6
Adjustment for actual expenditure 2010-15 ³	70.5
Net adjustment from logging up and logging down ^{3,4}	50.0
Adjustment for shortfalls ^{3,4}	0.0

	2014-15
Adjustment for serviceability shortfalls ⁵	0.0
Other adjustments ⁶	0.0
Opening RCV 1 April 2015	3,150.1

Notes:

1. Land sales adjustment is set out in table AA3.18.
2. 2009-10 actual expenditure adjustment is set out in table AA3.18.
3. A component of the CIS adjustment as set out in table AA3.16.
4. The net adjustment from the change protocol is set out in table AA3.7.
5. The serviceability shortfall adjustment is set out in table AA3.11.
6. Other RCV adjustments are set out in table AA3.18.

Table A3.7 Dŵr Cymru's wholesale wastewater return on RCV (£ million)

	2015-16	2016-17	2017-18	2018-19	2019-20
Opening RCV	3,150.1	3,192.4	3,236.1	3,279.5	3,320.1
RCV additions (from totex)	114.8	117.3	117.9	116.3	117.2
Less RCV run-off	72.5	73.5	74.6	75.7	76.8
Closing RCV	3,192.4	3,236.1	3,279.5	3,320.1	3,360.4
Average RCV (year average)	3,171.2	3,214.2	3,257.8	3,299.8	3,340.2
Return on capital	114.2	115.7	117.3	118.8	120.2

A3.3.4 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 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. We have intervened and as a result the revenue adjustments for wholesale wastewater have changed from -£18.3 million to -£17.8 million. We summarise these interventions in

table A3.8 below, and quantify the resulting adjustments within this final determination. The impact on the opening RCV of 2010-15 adjustments is shown in table A3.6 above and we discuss our interventions in this area further in annex 3.

The main change we have made in the final determination in reconciling the company's 2010-15 performance results from the change in CIS methodology in relation to using the post-tax cost of capital as the discount rate when calculating future revenue adjustments.

When making this final determination 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 CIS, 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 A3.8 Dŵr Cymru'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 have included our view of the company's SIM reward, which we have calculated as 0.2%. Our intervention increased revenue by £1.9 million.	2.0	3.9	3.9
RCM	<p>We have intervened in the following areas:</p> <ul style="list-style-type: none"> used the company's May 2014 tables; corrected data inconsistencies related to the number of households billed; used our view of FD09 assumptions; and corrected inconsistencies between outturn financial year average RPI in the company's submission. <p>Combined, our interventions reduced revenue by £1.2 million compared to the company's revised business plan.</p>	16.7	15.6	15.5
OIA	There are no interventions in this area.	0.0	0.0	0.0
CIS	As for all companies, 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	-37.0	-38.3	-37.2

Area of intervention	Intervention	Total revenue adjustment 2010-15 (post intervention)		
		Company view	Draft determination	Final determination
	<p>adjustment in the 2010-15 period.</p> <p>In carrying out our assessment, we have included our view of the applicable change protocol amounts and used the inflation assumptions from table A9.</p> <p>Combined, our interventions reduced revenue by £0.3 million compared to the company's revised business plan.</p>			
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 Dŵr Cymru's wholesale wastewater control is shown in table A3.9.

Overall, Dŵr Cymru's wholesale wastewater revenue allowance will be £354.9 million in 2015-16, decreasing by 2.9% to £344.7 million in 2019-20.

Table A3.9 Dŵr Cymru's wholesale wastewater allowed revenue (£ million)

	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Totex	280.4	277.6	272.8	265.9	261.4	1,358.1
PAYG rate	59.1%	57.8%	56.8%	56.3%	55.2%	
Totex additions to the RCV	114.8	117.3	117.9	116.3	117.2	583.4
RCV (year average)	3,171.2	3,214.2	3,257.8	3,299.8	3,340.2	
Wholesale allowed revenue build up:						
PAYG ¹	166.1	160.7	155.3	150.0	144.7	776.8
Return on capital	114.2	115.7	117.3	118.8	120.2	586.2
RCV run-off	72.5	73.5	74.6	75.7	76.8	373.1
Tax ²	0.0	0.0	0.0	0.0	0.0	0.0
Income from other sources ^{3,4}	-0.1	-0.1	-0.1	-0.1	-0.1	-0.7
Reconciling 2010-15 performance	-3.6	-3.6	-3.6	-3.6	-3.6	-17.8
Ex ante additional menu income	1.0	1.0	1.0	1.0	1.0	5.0

	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Wholesale allowed revenue adjustments:						
Capital contributions from connection charges and revenue from infrastructure charges	4.9	5.1	5.3	5.5	5.7	26.5
Final allowed revenues	354.9	352.3	349.8	347.3	344.7	1,749.0

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 section A3.3 in policy chapter A3.

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 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.

For the wholesale wastewater control we are not allowing additional uncertainty mechanisms within this framework.

In table A3.10 below, we set out Dŵr Cymru's proposed wholesale wastewater uncertainty mechanisms and our assessment of these proposals.

Table A3.10 Dŵr Cymru's proposals for wholesale wastewater uncertainty mechanisms

Assessment at draft determination	Our assessment
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Assessment at draft determination	Our assessment
<p>In the draft determination we did not accept the company's proposed uncertainty mechanism on wastewater business rates.</p>	<p>No change to draft determination position given that we have already not accepted the mechanism and the company has not objected.</p>
<p>Natural Resources Wales saw a change mechanism as necessary to permit the management of present and future statutory obligations. It will be working with the company to develop a suitable mechanism.</p>	<p>No change to the draft determination position. This is because the company has not proposed an uncertainty mechanism for new statutory requirements; we have not allowed such a mechanism for other companies in our draft determinations; and Natural Resources Wales has not provided new evidence why the uncertainty mechanism meets our criteria of materiality, controllability, company specific protection and consumer interests.</p> <p>This does not affect the company's responsibility to meet all statutory obligations. The final determination provides funding for the company for the 2015-20 period and it is the company's responsibility to manage any uncertainty. We note that there are a range of existing mechanisms available to companies to manage uncertainty, including:</p> <ul style="list-style-type: none"> • totex sharing menu; • interim determination of K (IDoK's); and • substantial favourable effects and substantial adverse effects clauses in Condition B of the licence.

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 determination. 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 Dŵr Cymru’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 Dŵr Cymru

Area	Company-specific representations	Detailed commentary in this company-specific appendix
Outcomes, performance commitments and incentives	Dŵr Cymru CCG CCWater	Annex 4
Outcome delivery and reporting	None	Annex 4
ACTS calculation	Dŵr Cymru	Section A4.3
Allocation of costs	Dŵr Cymru	Section A4.3.1
Adjustments	Dŵr Cymru CCG CCWater	Section A4.3.2 and annex 2

Area	Company-specific representations	Detailed commentary in this company-specific appendix
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.

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

For some performance commitments 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 outcomes, performance commitments and incentives, and our consideration of relevant responses, is provided in annex 4..

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

Company proposal			Intervention
Outcome	Performance commitment	Incentive type	
Best in class customer service	SIM ¹	Financial – reward and penalty	No intervention
	Earning the trust of customers	Reputational	No intervention
Affordable prices	Affordable bills	Reputational	No intervention
	Help for disadvantaged customers	Reputational	No intervention

Note:

1. We have required all companies to include a performance commitment based on the SIM.

A4.3 Costs

Our assessment of the industry ACTS, and therefore Dŵr Cymru's retail costs, has changed since we made our May draft determination. The change reflects the additional retail cost information that we have received from companies receiving their draft determinations in August and our assessment of those costs. It also reflects changes following representations from all companies. We have updated our view of costs under the 'equivalence of treatment' principle.

Our approach to the household retail control is set out in policy chapter A5. As set out in policy chapter A5, we have adjusted companies' costs to align to the 2013-14 base year – this is consistent with the position the company proposed in its representation. 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.

Dŵr Cymru made representations on how the ACTS is calculated. In particular the company represented on:

- the calculation of the efficiency challenge for the additional cost to serve metered customers; and
- the use of an un-weighted average to calculate the ACTS.

The company's representations are discussed alongside representations made by other companies in policy chapter A5. We have taken these representations 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

In table A4.3 below, we summarise our assessment of Dŵr Cymru's cost allocation methodology.

Table A4.3 Our assessment of Dŵr Cymru’s cost allocation methodology

Area assessed	Assessment
No potential material misallocations	Pass
Adequate assurance provided	Pass
Reconciliation to regulatory accounts and December business plan provided	Pass

On 29 August 2014 we wrote to the company, asking it to undertake a cross check of its allocation of doubtful debt based on outstanding debt against an allocation based on write-offs. We had identified this issue as part of our industry wide review of cost allocation submissions in June 2014.

In response, Dŵr Cymru completed this cross check and, as a consequence, proposed reallocating its doubtful debts based on write-offs. We have accepted the company’s allocation based on debt write offs. This is because we agree that this is a more suitable proxy cost driver for the allocation of doubtful debts than the movement in outstanding debt, in the absence of the direct attribution which our guidance prescribes.

However, we note that from 2015-16 all companies will need to have the systems in place to be able to directly attribute their annual doubtful debt charge between household and non-household on a customer-type specific basis. We will confirm this in the regulatory accounting guidelines for 2015-16, which we will publish early in 2015 following consideration of responses to other matters covered in our recent consultation on regulatory reporting. We are satisfied that the company has addressed the outstanding action. Therefore we have used the company’s cost allocation between retail and wholesale and between household and non-household retail to set our final determination.

The impact of the reallocation of doubtful debts is to increase non-household retail operating costs and decrease household retail operating costs by £1.714 million for 2013-14 (£8.571 million for 2015-20).

The company has also made a representation on the allocation of its costs between base costs and the additional costs to serve metered customers. The company has proposed a reallocation that moves costs into the additional cost to serve metered customers from base cost to serve. The company has provided external assurance of these allocations.

We are accepting the company's reallocated costs. The company's original submission only included the costs of reading meters in the additional costs to serve metered customers. As the new allocations include, for example, costs associated with issuing more frequent bills, we consider the revised allocations to more accurately reflect the true additional cost to serve metered customers.

A4.3.2 Adjustments

In its revised business plan, submitted in May 2014, Dŵr Cymru sought adjustments to the ACTS for:

- pension deficit repair costs;
- doubtful debt and debt management driven by deprivation and bill size; and
- input price pressure.

Pension deficit repair costs

In the final determination we have included an adjustment to the ACTS 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](#).

Doubtful debt and debt management driven by deprivation and bill size

As doubtful debt and debt management costs are both driven by deprivation and bill size, we consider these to be two parts of one adjustment. However, as only some evidence is common to both parts of the adjustment and this evidence was provided at different times, our assessment of the evidence is presented separately for each part of the adjustment.

In the final determination for Dŵr Cymru we have included an adjustment to the ACTS for:

- doubtful debt, but at lower value than that proposed by the company (our final assessment is unchanged from the draft determination); and
- debt management, but at lower value than that proposed by the company (our final assessment represents a change from our draft determination and reflects the provision of additional evidence as part of the company's representation).

Input price pressure

In the final determination we have not accepted the company’s proposal for an ACTS adjustment for input price pressure. We do not consider the evidence the company provided on management practices is sufficient and convincing to demonstrate that future cost increases are outside of efficient management control, that is affected in a materially different way to other companies, or that it could not absorb further input price pressures through efficiency gains.

Table A4.4 outlines our assessment of Dŵr Cymru’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, and our response to representations we received on our draft determination that are specific to this aspect of the company’s household retail control determination, are set out in annex 2.

Table A4.4 Dŵr Cymru’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
Doubtful debt and debt management driven by deprivation and bill size – doubtful debt	38.9	Pass	Pass	Pass	Pass
Doubtful debt and debt management driven by deprivation and bill size – debt management	6.2	Pass (as part of doubtful debt adjustment)	Pass	Pass	Pass
Input price pressure	14.8	Pass	Fail	Efficiency benchmarking evidence: Fail	n/a

		Adjustment assessment criteria			
Adjustment	Value (£m over 2015-20)	Materiality	Beyond efficient management control	Impact company in materially different way	Value of adjustment appropriate
				Upper quartile: Fail	

Note:

For household retail materiality is defined as being 2.25% of household retail opex plus depreciation over 2015-20.

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	8.597	8.168	7.759	7.371	7.002	38.898
Debt management	1.300	1.235	1.173	1.115	1.059	5.881
input price pressure	0.000	0.000	0.000	0.000	0.000	0.000
Pension deficit repair costs	0.105	0.105	0.105	0.105	0.105	0.524
Adjustments included in final determination	10.002	9.508	9.037	8.590	8.166	45.303

A4.3.3 New costs

Dŵr Cymru did not propose material household retail new costs.

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 automatic indexation for retail price controls to RPI.

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

The table below shows the household retail net margin over 2015-20.

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.

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	24.4					
Unmetered water and wastewater customers	31.8					
Metered water only customers	32.8					
Metered wastewater only customers	32.8					
Metered water and wastewater customers	40.1					
Industry ACTS (£/customer)						

	2013-14	2015-16	2016-17	2017-18	2018-19	2019-20
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		27.5	26.5	25.6	24.6	24.3
Unmetered water and wastewater customers		35.7	34.4	33.2	32.0	31.6
Metered water only customers		35.1	33.5	32.0	30.4	30.1
Metered wastewater only customers		34.7	32.7	30.7	28.7	28.4
Metered water and wastewater customers		43.4	41.7	40.1	38.3	37.9
Total allowed (£m)						
Cost to serve (excluding net margin)		51.4	49.8	48.3	46.7	46.6
Forecast household wholesale charge (including forecast RPI ²) ³		562.7	577.9	593.4	608.4	625.1
Household retail		57.0	55.6	54.3	52.8	52.8

	2013-14	2015-16	2016-17	2017-18	2018-19	2019-20
revenue (including an allowance for the net margin) ⁴						

Notes:

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

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.

Dŵr Cymru 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.

In this chapter, we provide details of Dŵr Cymru’s non-household retail price control.

In line with Welsh Government policy, non-household customers of companies operating wholly or mainly in Wales using less than 50 mega-litres (MI) of water per year are not expected to be able to choose their supplier during the next five years.

As such, we have taken a different approach to companies operating wholly or mainly in Wales to protect non-household customers. This includes setting a specific efficiency challenge and a non-household SIM that applies to Dŵr Cymru.

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 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 Dŵr Cymru’s non-household retail control and sets out where to find more information on our responses in this document.

We did not formally make our draft determination of Dŵr Cymru’s non-household control until August. We therefore received the representations on this element of its draft determination in October, at the same time as all other companies. These included representations on the form of the non-household control, an issue we invited views on after we made our May draft determination.

Table A5.1 Representations specific to the non-household retail control of Dŵr Cymru

Area	Company-specific representations	Detailed commentary in this company-specific appendix
Net margins	Dŵr Cymru	Section A5.3
Cost proposals	Dŵr Cymru	Section A5.4
Form of control	Dŵr Cymru 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 (for those customers using above 50Ml a year) or impacts from the company charging customers at levels different to the relevant default tariffs for the projected customers in each customer type. Furthermore, the controls for each customer type that we have set 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	9.6	9.1	8.7	8.3	8.3

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

The company proposed net margins that aggregated to 2.5% for contestable customers, and 1.0% for non-contestable customers. However, as part of its

representations, the company reviewed net margin and cost allocation approaches between customer types and proposed new allocations.

The new allocations (when combined) resulted in significant increases in the revenues proposed to be recovered from the company's non-contestable customers, and decreases for its contestable customers.

We queried the company whether:

- the change in allocations were discussed with, and assured or signed-off by, the company's Board;
- any external assurance had been gained on the changes in allocations; and
- the company had engaged with its customers regarding the change.

The company confirmed that its Board had approved its representation letter, and that a 'near-final' version of the letter had been sent to its CCG members. However, the representation letter makes no specific reference to the significant proposed increases for non-contestable customers.

With regard to the cost allocations, the company confirmed that PwC had reviewed the allocation of costs between households and non-households. However, the issue in question is the allocation between different non-household customer types.

Also in its response to our query, the company also highlighted that it had identified an error in its new allocations.

Given the large increase in proposed revenue to be recovered from non-contestable customers, without adequate assurance, we have not accepted the company's updated allocations. We have therefore used the net margins the company proposed as part of its revised business plan in the final determination.

A5.4 Cost proposals

As stated above, the company proposed updated cost allocations between non-household customer types and we did not accept this update. As set out in section A4.3.1, the company has reallocated some costs from household retail to non-household retail. We have accepted this reallocation and taken account of it by adjusting the costs to be recovered from the average revenue controls equivalently across the company's different non-household customer types, rather than using the company's proposed updated allocations.

As set out in the 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. All cost figures (unless otherwise specified) are five-year totals. As set out in policy chapter A6, 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.

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. This resulted in the company's proposals being adjusted from £0.052 million over the control period, to £0.084 million.

In total, this resulted in the company's proposed costs being adjusted from £38.266 million over the control period to £38.297 million (pre-efficiency challenge).

A5.5 Efficiency challenge

In our final methodology statement, we confirmed that we would set an up-front non-household efficiency challenge for companies operating wholly or mainly in Wales, by comparing their cost allocations for given customer types with equivalent costs in England.

In setting the benchmark for the company, we have compared costs across the industry for five different customer types:

- water unmeasured;
- water measured (<50 MI);
- sewerage unmeasured;
- sewerage measured; and
- trade effluent.

The implied efficiency challenge from each customer type is weighted by the number of customers the company has by each customer type to arrive at the overall efficiency challenge.

In our draft determination, this implied an efficiency challenge for Dŵr Cymru of less than its own proposed forecast. We therefore chose not to apply the efficiency

challenge, instead accepting the company's proposals as it offered a better outcome for customers.

As part of its representations, the company provided us with updated cost allocations between household and non-household retail – our assessment of this allocation is set out in section 4.3.1. In total, this increased the amount of costs allocated to non-household retail by £8.571 million.

This makes the company look less efficient for non-household retail than its previous submission. Applying the same methodology as we did for the draft determination results in a cost challenge of 24% by 2018-19 (from pre-efficient 2015-16 levels). This is comparable to the size of the efficiency challenge applied to the company's household retail costs. The company did not provide any representations on our methodology for applying the non-household retail efficiency challenge.

Like the household control, we are applying a three-year glide-path to efficiencies, with the efficient level of spend only needing to be fully reached by 2018-19. In total, our adjustments and efficiency challenge resulted in the company's proposed costs being adjusted from £38.266 million over the control period to £33.682 million.

A5.6 Form of control

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 carried out in 2016.

A5.7 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 Dŵr Cymru.

The average retail revenue per customer – £ (r) – has also been 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 A5.3 Non-household retail average controls per customer

Customer type	Units	2015-16	2016-17	2017-18	2018-19	2019-20
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Customer type	Units	2015-16	2016-17	2017-18	2018-19	2019-20
Raw Water < 50MI (Measured)	£	34.09	31.82	29.55	27.27	27.27
	%	1.0%	1.0%	1.0%	1.0%	1.0%
	£ (r)	40.63	38.83	36.76	34.71	34.96
Partially Treated Water < 50MI (Measured)	£	46.90	43.77	40.64	37.51	37.51
	%	1.0%	1.0%	1.0%	1.0%	1.0%
	£ (r)	60.12	57.65	54.95	52.30	52.79
Potable Water < 50MI (Non-household)	£	40.01	37.36	34.71	32.06	32.07
	%	1.0%	1.0%	1.0%	1.0%	1.0%
	£ (r)	46.38	43.81	41.30	38.77	38.89
Potable Water < 50MI (Non-household)	£	19.69	18.84	17.94	16.98	17.41
	%	1.0%	1.0%	1.0%	1.0%	1.0%
	£ (r)	22.61	21.86	21.04	20.15	20.67
Raw Treated Water > 50MI (Measured)	£	9,781.01	9,495.94	9,323.54	9,332.97	9,219.78
	%	2.5%	2.5%	2.5%	2.5%	2.5%
	£ (r)	21,476.20	21,402.84	21,561.71	21,890.49	22,018.80
Partial Water > 50MI (Measured)	£	14,500.81	14,076.12	13,819.28	13,828.98	13,655.83
	%	2.5%	2.5%	2.5%	2.5%	2.5%
	£ (r)	31,875.22	31,760.10	31,992.26	32,470.36	32,647.16
Water Large User 50MI-99MI (Measured)	£	2,372.71	2,303.30	2,262.43	2,260.42	2,233.54
	%	2.5%	2.5%	2.5%	2.5%	2.5%
	£ (r)	4,907.19	4,880.32	4,910.82	4,975.88	4,994.17
Water Large User 100MI-249MI (Measured)	£	3,318.69	3,220.82	3,163.44	3,162.40	3,122.10
	%	2.5%	2.5%	2.5%	2.5%	2.5%
	£ (r)	7,019.35	6,984.08	7,031.29	7,128.63	7,154.82
Water Large User 250MI-499MI (Measured)	£	6,710.59	6,511.43	6,393.84	6,395.86	6,310.59
	%	2.5%	2.5%	2.5%	2.5%	2.5%
	£ (r)	14,518.58	14,458.30	14,564.12	14,779.48	14,845.03

Customer type	Units	2015-16	2016-17	2017-18	2018-19	2019-20
Water Large User 500MI-1000MI (Measured)	£	10,415.45	10,124.37	9,947.68	9,969.36	9,868.02
	%	2.5%	2.5%	2.5%	2.5%	2.5%
	£ (r)	22,522.16	22,462.27	22,636.58	23,003.78	23,174.69
Water Large User >1000 (Measured)	£	18,694.04	18,161.03	17,838.57	17,871.61	17,672.52
	%	2.5%	2.5%	2.5%	2.5%	2.5%
	£ (r)	40,930.86	40,814.80	41,132.26	41,789.99	42,075.67
Special Agreement Register – Customer Reference WSHNONPOT8	£	1,638.46	1,596.19	1,569.26	1,568.56	1,553.97
	%	2.5%	2.5%	2.5%	2.5%	2.5%
	£ (r)	3,297.44	3,288.35	3,309.18	3,353.62	3,372.17
Special Agreement Register – Customer Reference WSHNONPOT9	£	37,728.58	36,690.27	36,035.73	36,073.67	35,599.45
	%	2.5%	2.5%	2.5%	2.5%	2.5%
	£ (r)	83,573.11	83,454.13	84,121.38	85,409.10	85,848.93
Special Agreement Register – Customer Reference WSHPOT1	£	1,526.05	1,489.59	1,465.76	1,467.44	1,452.68
	%	2.5%	2.5%	2.5%	2.5%	2.5%
	£ (r)	3,102.02	3,098.76	3,120.84	3,165.69	3,182.31
Sewerage Measured <100MI	£	41.94	39.17	36.39	33.62	33.64
	%	1.0%	1.0%	1.0%	1.0%	1.0%
	£ (r)	50.70	48.11	45.53	42.93	43.13
Sewerage Un- Measured <100MI	£	18.29	17.54	16.72	15.85	16.28
	%	1.0%	1.0%	1.0%	1.0%	1.0%
	£ (r)	22.26	21.60	20.89	20.10	20.64
Sewerage Measured >100MI	£	4,524.86	4,223.04	3,921.21	3,619.39	3,619.39
	%	1.0%	1.0%	1.0%	1.0%	1.0%
	£ (r)	7,247.29	7,012.47	6,776.40	6,539.67	6,596.32
Sewerage Trade Effluent <100MI	£	207.83	193.96	180.10	166.24	166.24
	%	1.0%	1.0%	1.0%	1.0%	1.0%
	£ (r)	323.05	311.57	300.18	288.62	290.40

Customer type	Units	2015-16	2016-17	2017-18	2018-19	2019-20
Sewerage Trade Effluent >100MI	£	3,989.72	3,723.59	3,457.47	3,191.34	3,191.34
	%	1.0%	1.0%	1.0%	1.0%	1.0%
	£ (r)	6,392.58	6,176.41	5,962.32	5,744.36	5,781.58
Outfall Tariff	£	1,405.29	1,311.55	1,217.81	1,124.08	1,124.08
	%	1.0%	1.0%	1.0%	1.0%	1.0%
	£ (r)	2,169.09	2,091.12	2,013.79	1,935.25	1,947.05

A5.8 Company outcomes, performance commitments and delivery incentives

In policy chapter A2, we discuss our approach to outcomes.

We summarise the outcomes, performance commitments and ODIs for the non-household retail control for Dŵr Cymru in table A5.4 below. This includes the non-household SIM (Wales) that applies to companies operating wholly or mainly in Wales, such as Dŵr Cymru. This additional protection is being put in place as the scope for retail competition in Wales is more limited than in England, and so some of these customers will not benefit directly from the protection afforded by competition.

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

For some performance commitments 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 A5.4.

Full detail of the non-household retail outcomes, performance commitments and incentives, and our consideration of relevant representations, is provided in annex 4.

Table A5.4 Non-household retail outcomes, performance commitments and incentives

Company proposal			Intervention
Outcome	Performance commitment	Incentive type	
Best in class customer service	SIM ¹	Financial – reward and penalty	No intervention
	Business customer satisfaction	Financial – penalty only	Company specific assessment: We confirm our draft determination intervention to replace the one off penalty with a graduated one.
	Earning the trust of customers – % of customers surveyed that say they trust the company	Reputational	No intervention
Affordable prices	Affordable bills – annual increase	Reputational	No intervention

Note:

1 We have required Dŵr Cymru to include a performance commitment based on the non-household (SIM).

A6 Appointee financeability and affordability

In this section we discuss at an appointee level:

- bills and K factors;
- return on regulatory equity;
- financeability; and
- affordability.

However, we first consider the responses to our draft determinations that are specific to Dŵr Cymru 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 determination. 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 Dŵr Cymru 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 Dŵr Cymru

Area	Company-specific representations	Detailed commentary in this company-specific appendix
Bills and K factors	None	Section A6.2
Appointee level uncertainty and gain share mechanisms	CCWater	Section A6.3
Return on regulatory equity range	None	Section A6.4
Financeability	Dŵr Cymru	Section A6.5
Affordability	CCWater	Section A6.6
Financial modelling	Dŵr Cymru	Section A6.7

A6.2 Bills and K factors

Table A6. below sets out the allowed revenues we have assumed in our final determination for Dŵr Cymru to deliver for its customers on its:

- statutory duties; and
- associated performance commitments.

It also sets out the average customer bills on the basis of the final determination.

Table A6.2 Dŵr Cymru’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	263.0	263.6	264.2	264.8	265.4	1,321.1
Wholesale water –	0.0%	0.8%	0.3%	0.0%	0.0%	-

	2015-16	2016-17	2017-18	2018-19	2019-20	Total
K (%)						
Wholesale wastewater – allowed revenues (£m) ²	354.9	352.3	349.8	347.3	344.7	1,749.0
Wholesale wastewater – K (%)	0.0%	-0.1%	-0.6%	-0.9%	-0.9%	-
Retail household allowed revenue (£m)	57.0	55.6	54.3	52.8	52.8	272.6
Retail non-household expected revenue (£m)	9.6	9.1	8.7	8.3	8.3	44.1
Average household bill – water (£)	181	180	179	177	177	-
Average household bill – wastewater (£)	253	250	246	243	240	-
Average household bill – combined (£) ^{3, 4}	411	407	403	399	396	-

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 Dŵr Cymru'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 Dŵr Cymru’s household and non-household customer base. In practice, this will depend upon the structure of wholesale charges implemented by Dŵr Cymru.

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 Dŵr Cymru in the table below.

Table A6.3 Dŵr Cymru’s allowed wholesale revenue for 2014-15

Dŵr Cymru	Wholesale Water	Wholesale Wastewater
Allowed wholesale revenue 2014-15 (£ million)	277.5	374.4

A6.3 Uncertainty and gain share mechanisms

We outline our approach to uncertainty mechanisms and “pain and gain share” in policy chapter A7.

Dŵr Cymru did not propose any appointee level uncertainty mechanisms beyond those that will already form part of the regulatory framework for 2015-20.

We did receive a specific representation from CCWater though, which is summarised in the table below, along with our response.

Table A6.4 Representations specific to the appointee uncertainty and gain share mechanisms for Dŵr Cymru

Respondent	Summary of comment	Ofwat response
CCWater	CCWater considered the ownership model of Dŵr Cymru allowed for gain sharing with customers.	Ofwat recognises that the ownership structure of Dŵr Cymru can facilitate gain sharing with customers. It is also the case that other ownership structures provide these opportunities.

A6.4 Return on regulatory equity range

Dŵr Cymru 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 structure³. We have identified the RoRE impact separately for outcome delivery incentives (ODIs), total expenditure (totex) performance, financing and the service incentive mechanism (SIM). We note that Dŵr Cymru'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.

Table A6.5 Whole company RoRE range

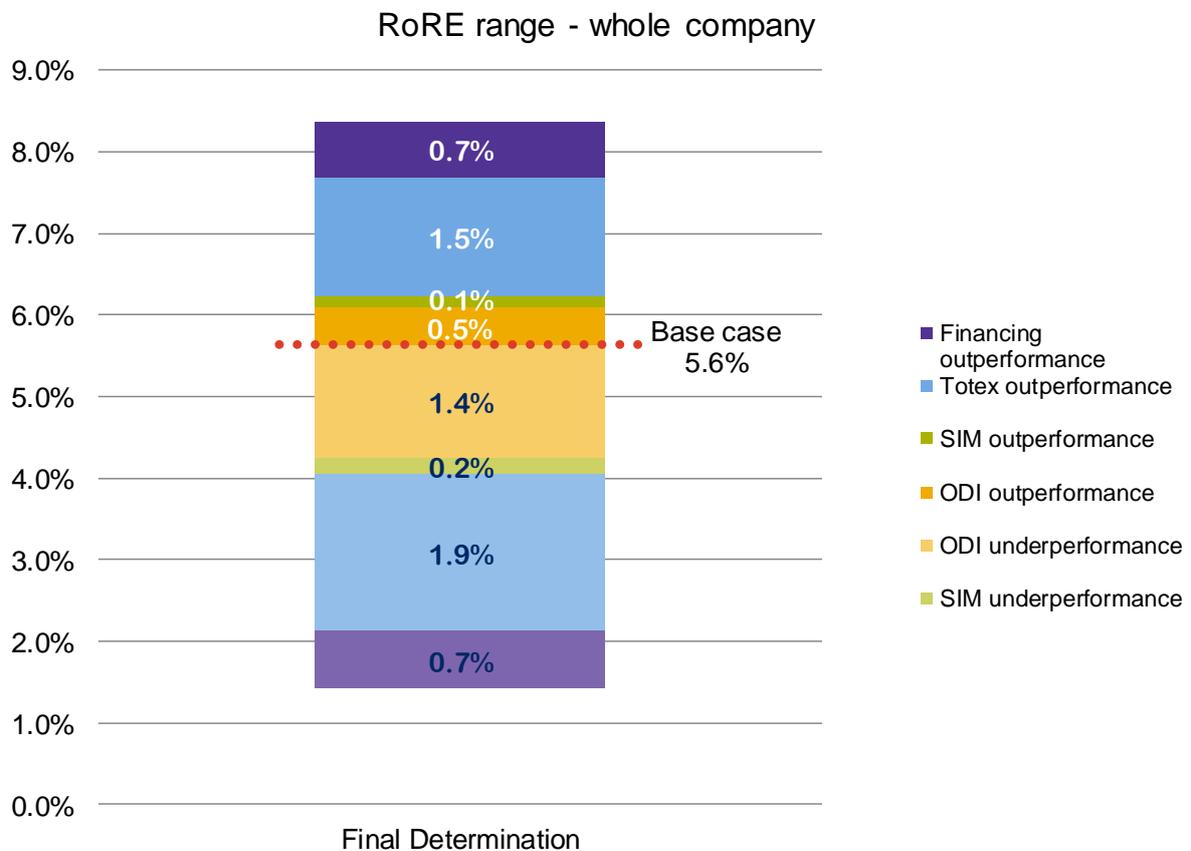
	Lower bound (%) – appointee	Upper bound (%) – appointee
Overall	-4.2%	+2.7%
ODIs	-1.4%	+0.5%
Totex	-1.9%	+1.5%
Financing	-0.7%	+0.7%
SIM	-0.2%	+0.1%

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 weighted average cost of capital (WACC).

	Lower bound (%) – appointee	Upper bound (%) – appointee
Commentary:		
<p>The whole company RoRE range is from 1.4% to 8.4%, with a base case of 5.6% and overall impacts from -4.2% to +2.7%.</p> <p>The totex risk range from -1.9% to +1.5% is marginally wider than the range in the draft determination of -1.8% to +1.4% to reflect the final position on uncertainty mechanisms. The overall impacts are broadly in line with other companies.</p> <p>The ODI risk range proposed by Dŵr Cymru in response to the draft determination was from -2.4% to +0.4%. This is wider than the -1.5% to +0.2% in the draft determination and reflects the company's representations, particularly on customer acceptability of drinking water and supply interruptions. We have adjusted this to -1.4% to +0.5% to take account of the interventions discussed in annex 4. The adjustment includes the effect of capping, which affects the downside case of the water element (which limits the downside on water ODIs from 3.5% to 2%). This limits the overall appointee ODI impact to -1.4% (prior to capping the overall ODI range is -1.9% to +0.5%).</p> <p>Financing risk impacts from -0.7% to +0.7% are unchanged from the draft determination.</p> <p>The SIM risk range of -0.2% to +0.1% is also unchanged from the draft determination.</p>		

The composition of the RoRE range for Dŵr Cymru at an appointee level is shown in Figure A6.1 below.

Figure A6.1 Dŵr Cymru’s RoRE range – appointee



Source: Our calculations based on information from Dŵr Cymru

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.

In table A6.6, we set out the notional financeability ratios associated with Dŵr Cymru's 2 May revised business plan, draft determination and final determination.

Table A6.6 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)	2.74	2.50	2.49	2.54
Adjusted cash interest cover ratio (ACICR)	1.76	1.57	1.57	1.59
Funds from operations(FFO)/debt	7.87%	7.01%	7.00%	6.97%
Retained cash flow/debt	6.83%	4.44%	4.43%	4.41%
Gearing	60.49%	62.26%	62.30%	62.52%
Dividend cover (profit after tax/dividends paid)	0.91	0.21	0.19	0.19
Regulatory equity/regulated earnings for the regulated company ¹	17.01	18.02	18.06	17.95
RCV/EBITDA	13.57	13.95	13.95	14.13

Commentary:

Dŵr Cymru holds a rating of A3/A and this is the target rating for the actual company over the 2015-20 period. It is targeting an investment grade rating for the notional company. Dŵr Cymru considered its revised business plan is financeable on both an actual and notional basis.

We have estimated similar notional ratios as the company when adjusting for differing assumptions under a notional structure for example, Dŵr Cymru has assumed a lower dividend schedule, which results in reducing gearing, and assumed a higher level of index linked debt than we assume for a notional company (45% compared to 33%). The dividend

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

cover ratio is also affected by differences in operating profit calculations.

At draft determination we noted there were some differences between some of the financial ratios for Dŵr Cymru based on the notional company compared with typical credit rating thresholds. The adjusted interest cover ratio was consistent with stronger investment grade ratios while the funds from operations (FFO)/debt ratio and interest cover ratio were weaker. The ratios are broadly stable over the 2015-20 period.

Given the level of the FFO/Debt ratio, prior to publication of the draft determination, Dŵr Cymru provided additional assurance that the plan was financeable on a notional basis. We noted that, if required, the company has scope to use menu choices to increase the level of revenue in period. We considered that the draft determination was financeable.

While we have reduced the cost of capital, the notional financial ratios are similar to those for the draft determination, where Dŵr Cymru provided assurance that it was financeable. Further the impact of the reduction of WACC on notional financeability is very small, as evidenced by the change in ratios since draft determination and therefore we can still place some weight on Dŵr Cymru assurance of financeability. We therefore consider that the final determination is financeable.

In its representation, Dŵr Cymru considered that a further reduction in the cost of capital is not justified and noted that any reduction would require its Board to revisit its views on financeability. As we set out above, we consider that the company is financeable with the reduction in the cost of capital given the very modest change in key financial ratios. We would consider that the Board of Dŵr Cymru should consider financeability as part of its decision on whether to accept the final determination.

Note:

1. The regulatory equity/regulatory earnings ratio is now defined on the basis of earnings after real interest and tax; previously, this has been defined on the basis of nominal interest for the early draft determinations. The use of real interest is more consistent with this measure as an economic measure of equity returns.

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 A6.7 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. The PAYG rate

and RCV run-off rates have not changed since the company submitted its revised plan in May.

Table A6.7 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	43.9%	5.2%	9.8%
Company May plan	63.3%	2.8%	6.8%
Draft determination	63.3%	2.8%	7.2%
Final determination	63.3%	2.8%	7.1%

A6.6 Affordability

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

Table A6.8 sets out the change in household bill profile between the company's December and May business plans and the draft and final determination.

Table A6.8 Household bill profile

	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Company December plan	419	415	411	407	403	399
Company May plan	419	411	409	403	397	393
Ofwat calculation for May plan	416	413	411	407	403	400
Ofwat calculation for draft determination – pre-reprofiling	416	409	407	403	398	396
Ofwat calculations for draft determination	416	409	407	403	398	396
Ofwat calculations for final determination	416	411	407	403	399	396

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 A6.8).

The final determination leads to a reduction in bills in 2015-20. The company did not make any representations on bill profiling. We have reprofiled to smooth bills, consistent with the company's plan.

The following text sets out the reasons why this final determination is assessed as affordable. It describes key changes in relation to Dŵr Cymru's December business plan that we also assessed as affordable.

A6.6.1 Acceptability

Dŵr Cymru conducted customer research to support its original December 2013 business plan submission. Its research found 94% of customers supported a plan that had an associated bill of £399 in 2019-20. It is reasonable to assume that the proposed additional reduction of £6 put forward in the company's resubmitted business plan will remain acceptable to the majority of the company's customers. The company states that its revised plan means that the average household bill will be £26 lower than in 2014-15 in real terms. We received one representation from a third party on acceptability.

Table A6.9 Representations specific to Dŵr Cymru's affordability measures

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 58% 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 95% found the plan acceptable. The company's plan was 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

Respondent	Summary of comment	Ofwat response
		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

Dŵr Cymru 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 some these schemes and to introduce new initiatives. The key measures are summarised in the following table:

Table A6.10 Key affordability measures

Measure	Current coverage (no. of customers)	Forecast 2019-20 coverage
WaterSure	New	20,000
Water direct	11,400	8,900
Flexible payment plans	Offered but not reported	Offered but not reported
Debt advice – 3rd party	200	2,400
Win-win tariff (Welsh water assist)	38,200	Transitions to social tariff
Write-off scheme	3,300	6,000
Water efficiency advice/audits	Available but not reported	10,000
Social tariff	New	80,000-100,000
Water collect – registered social landlord discount	10,000	12,000

A6.6.3 Longer-term affordability

The company has explicitly considered future affordability in its consideration of intergenerational equity issues arising from setting PAYG rates and RCV run off. The company has not altered PAYG and RCV run off rates from its revised business plan. Longer term, the company forecasts the maintenance of the average PAYG rate and the RCV run off rate in 2020-25 as set out in its December business plan submission.

Consistent with our original assessment there is therefore sufficient and convincing evidence that the company's use of cost recovery tools will not adversely affect current or future affordability. There are no changes to the rates in 2020-25 and the company states there is no expectation that bills will need to rise in real terms in that period.

A6.6.4 Longer-term affordability – ODIs

There is some evidence that the company's proposals for maximum ODI rewards will not have a negative impact on overall affordability in the longer term. Results of customer research showed that a proposal for a real term price decrease of £5 for 'High' performance and £47 for 'low' performance against an alternative of a fixed price decrease of £26 that did not vary with performance was supported by the majority (57%) of customers. 31% preferred the option of a fixed decrease. The company's peer reviewer was supportive of the research and noted that the variable option was supported for rational reasons.

Therefore, there is sufficient evidence that the company's revised proposals on ODIs will not have a significant impact on affordability in the longer term when taken in the context of the downward pressure on bills from the reduction in the allowed return as even 'high' performance result in real term bill reductions.

A6.7 Financial modelling

In response to company-specific representations, we have made some adjustments to our financial model. The representations, and our response, are set out in table A6.11.

Table A6.11 Representations specific to Dŵr Cymru for financial modelling

Respondent	Summary of comment	Ofwat response
Dŵr Cymru	<p>After analysing our financial model, the company considered that in the draft determination:</p> <ul style="list-style-type: none"> • capital income had been netted off twice from the wholesale revenue requirements due to the company’s incorrect interpretation of the business plan tables (£24m impact over 2015-20); • wholesale water totex was overstated by £1.5 million due to an incorrect sign in the financial model; and • the wholesale WACC in the financial model was incorrectly stated as 3.6975% instead of 3.70%. 	<ul style="list-style-type: none"> • We accept that Dŵr Cymru has made an error in business table submissions and have adjusted accordingly. • We accept that water totex was overstated as the model uses an incorrect sign for netting off capital income for 2015-16 and have amended the model accordingly. • Based on updated market evidence we have reset the wholesale WACC to 3.6%. The model has been adjusted accordingly

Annex 1 Wholesale costs

Establishing final determination thresholds

Under our ‘equivalence of treatment’ principle the company could have been subject to updates to our views on wholesale costs – though we note that we have not changed our view of costs for the final determination.

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
1,091.0	127.2	18.0	None	1,236.2	None

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
83.2	3.3	40.7	0.0	0.0	127.2

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 vs plan
1,240.2	1,236.2	4.0	-101.8

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							
None	-	-	-	-	-	-	-
Unmodelled cost assessment ¹							
Making ecological improvements at abstractions (Habitats Directive, SSSI, BAPs)	32.2	2.8	Pass	Pass	Pass	Partial Pass	9.8
Investment at two WTWs to improve final water quality at Bryn Cowlyd, and Tynywaun,	38.0	13.4	Pass	Pass	Pass	Partial Pass	8.2

Note:

1. For the water service the unmodelled adjustment to the basic cost threshold is triangulated and is therefore one third of the amount allowed.

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
1210.7	58.8	12.8	22.7	65.0	0.3	None	1,370.3	14.9

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
56.7	2.1	0.0	0.0	0.0	58.8

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 vs plan
1,329.0	1,370.3	-41.4	104.3

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 dives							
NEP 5	65.0	0.0	Pass	Pass	Pass	Pass	65.0
Private sewage pumping stations	36.8	0.0	Fail	Fail	Fail	Fail	22.7 ¹
Unmodelled cost assessment							
Llanelli/ Gowerton	24.9	18.2	Pass	Pass	Fail	Fail	0.0
NEP – Investigations (S3011)	16.4	3.6	Pass	-	Pass	Pass	12.8
NEP Conservation Drivers (S3004)	13.7	5.5	Pass	-	Fail	Fail	0.0

Note:

1. This is the Ofwat modelled allowance as per table AA1.5. There is no allowance for the company claim for additional private sewage pumping station expenditure.

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.

Doubtful debt and debt management driven by deprivation and bill size

Doubtful debt – summary

- In its revised business plan, Dŵr Cymru sought an adjustment for doubtful debt and debt management costs driven by deprivation and bill size of £48.2 million over 2015-20, of which £42.0 million related to doubtful debt.
- We accepted the company's proposal for doubtful debt in the draft determination, but at a lower value of £38.9m.
- Our position is unchanged at final determination.

Doubtful debt – our final assessment

Materiality

The company's proposed adjustment of £42.0 million is material when considered in combination with debt management costs of £6.2 million, at 16.3% of household retail operating expenditure plus depreciation over 2015-20 – this materiality figure includes the value of the proposed debt management costs adjustment.

Beyond efficient management control

As we concluded at draft determination, it is still the case that Dŵr Cymru provided sufficient and convincing evidence of its management practices in relation to doubtful debt and that these were in line with a qualitative review of good practice in the management of bad debt costs. We therefore consider these costs to be beyond efficient management control.

Impact company in materially different way

In its revised business plan the company provided an econometric model⁴ as evidence of the nature of the relationship between deprivation and doubtful debt and, specifically, the scale of the impact of deprivation on doubtful debt compared with other drivers of doubtful debt costs.

This resulted in a total adjustment value of £48.2 million over the period 2015-20, of which £42.0 million related to doubtful debts and £6.2 million related to debt management costs. No additional evidence was provided to support the value for the adjustment for debt management costs and so this £6.2 million was not allowed in the draft determination. Dŵr Cymru provided further evidence to support the debt management part of its adjustment in its representation and this is considered in the following section.

Our assessment of Dŵr Cymru's evidence on its doubtful debt adjustment included an independent review of the underlying econometric evidence for the requested adjustment⁵. Our consultants replicated and reviewed Dŵr Cymru's modelling approaches to check their robustness and calculations. As a result of this additional analysis, we asked Dŵr Cymru to address a number of specific queries and statistical shortcomings that we had identified in relation to its econometric analysis. This resulted in Dŵr Cymru undertaking some additional, alternative modelling analysis to cross-check and verify the value of the proposed adjustment.

As a result of this additional analysis, we concluded that Dŵr Cymru's alternative modelling approach had addressed the queries and statistical shortcomings we identified and that Dŵr Cymru had provided us with sufficient and convincing evidence that it is impacted in a materially different way to other companies.

Our assessment for the final determination is unchanged from the draft determination.

Value of proposed adjustment

The value of this adjustment we have accepted over the period 2015-20 is £38.9 million, compared to the £42.0 million (excluding debt management costs) that Dŵr Cymru had sought in its resubmitted business plan. The £3.1 million difference between the adjustment value of £42.0 million and the £38.9 million allowed is due to

⁴ 'Impact on doubtful debt as a result of changes in deprivation and bill levels over 2015–20' – figures in this report are in 2010-11 constant prices not 2012-13 prices

⁵ 'PwC review of Dŵr Cymru's doubtful debt cost models' – figures in this report are in 2010-11 constant prices not 2012-13 prices

us accepting a value for the adjustment based on the updated modelling that Dŵr Cymru submitted on 16 May 2014, after it submitted its revised business plan.

Debt management – summary

- In its revised business plan, Dŵr Cymru sought an adjustment for debt management of £6.2 million over 2015-20 as part of its broader adjustment for costs driven by deprivation and bill size.
- We did not accept the company's proposal in the draft determination.
- In our final determination, we have accepted the company's proposed adjustment, but at a lower value of £5.9 million. Our final assessment reflects the provision of additional evidence as part of the company's representation.

Debt management – our final assessment

Materiality

The company's proposed adjustment of £6.2 million is material when considered in conjunction with the doubtful debt adjustment, at 16.3% of household retail operating expenditure plus depreciation over 2015-20.

Beyond efficient management control

As we concluded at draft determination, it is still the case that the evidence on management practices for both doubtful debt and debt management is sufficiently convincing. Combined with the new debt management model the company submitted as part of its representation, the company has provided sufficient and convincing evidence that these debt management costs are beyond efficient management control.

Impact company in materially different way

Dŵr Cymru has the third highest debt management costs per customer (around 50% above industry average). The company also has the third highest bills and the fourth highest deprivation (Dŵr Cymru's consultant's measure). Dŵr Cymru's new econometric models, which use industry data and which it submitted as part of its representation, provide sufficiently robust evidence that deprivation and average bills affect its debt management costs in a materially different way to other companies.

Value of proposed adjustment

We accept the company's proposal for an ACTS adjustment for debt management but with a reduced value of £5.9 million. Dŵr Cymru's modelling supports the size of the adjustment in the starting year, and it has also applied a significant efficiency challenge to the adjustment of 5% nominal reduction per year. The reduction of £0.3 million is to correct for a modelling error where the smearing adjustment⁶ has not been applied.

The modelling and efficiency evidence Dŵr Cymru has submitted on debt management is of a similar quality to that which we accepted for its doubtful debt adjustment.

Input price pressure – summary

- In its revised business plan, Dŵr Cymru sought an adjustment for input price pressure of £14.8 million over 2015-20.
- We did not accept the company's proposal in the draft determination.
- Our position is unchanged for the final determination, and we have not accepted the adjustment for final determination.

Input price pressure – our final assessment

Materiality

The company's proposed adjustment of £14.8 million is material, at 5.2% of household retail operating expenditure plus depreciation over 2015-20.

Beyond efficient management control

We do not consider that the evidence provided on management practices is sufficient and convincing to demonstrate that future cost increases are outside of efficient management control.

⁶ The smearing transformation is a mathematical adjustment applied to avoid bias when transforming a logarithmic term to a numeric value.

Impact company in materially different way

The company did not provide convincing evidence on relative efficiency, including benchmarking. In addition, our assessment for ACTS shows that the company is not upper quartile efficient for unmetered retail costs.

Therefore the company has not demonstrated that it is affected in a materially different way to other companies as the company has not demonstrated that it is efficient relative to other companies in the industry and could not absorb further input price pressures through efficiency gains.

Value of proposed adjustment

As Dŵr Cymru has not justified an adjustment being made, we have not assessed the justification for the value of the adjustment.

We considered three representations specific to the proposed ACTS adjustments, which are set out in table AA2.1 below.

Table AA2.1 Representations specific to the household retail adjustments for Dŵr Cymru

Respondent	Summary of comment	Ofwat response
Dŵr Cymru	The company provided further evidence to support its adjustment claim for debt management costs driven by deprivation.	We have accepted the company's proposed adjustment for debt management costs but at a reduced value – see above for more details.
CCG	The CCG considered that economic and social factors were relevant to debt management costs and the ACTS.	We have accepted the company's proposed adjustment for debt management costs at a reduced value – see above for more details.

Respondent	Summary of comment	Ofwat response
CCWater	CCWater questioned whether the doubtful debt adjustment was justifiable.	We considered in our draft determination that the company has provided strong evidence in this area and the information submitted by CCWater has not changed this. – see above for more details.

Table AA2.2 Household retail adjustments (£ million, nominal prices)

	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Adjustments proposed in Dŵr Cymru's May business plan						
Doubtful Debt	9.285	8.821	8.380	7.961	7.563	42.010
Debt management	1.368	1.300	1.235	1.173	1.115	6.191
Input price pressure	2.958	2.958	2.958	2.958	2.958	14.792
Pension deficit repair costs	0.190	0.190	0.190	0.000	0.000	0.571
Adjustments included in business plan	13.802	13.270	12.764	12.093	11.636	63.564
Adjustments included in draft determination						
Doubtful Debt	8.597	8.168	7.759	7.371	7.002	38.898
Debt management	0.000	0.000	0.000	0.000	0.000	0.000
Input price pressure	0.000	0.000	0.000	0.000	0.000	0.000
Pension deficit repair costs	0.105	0.105	0.105	0.105	0.105	0.524
Adjustments included in draft determination	8.702	8.273	7.864	7.476	7.107	39.422
Adjustments proposed in Dŵr Cymru's representations						
Doubtful Debt	9.285	8.821	8.380	7.961	7.563	42.010
Debt management	1.368	1.300	1.235	1.173	1.115	6.191
input price pressure	2.958	2.958	2.958	2.958	2.958	14.790

	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Pension deficit repair costs	0.190	0.190	0.190	0.000	0.000	0.571
Adjustments included in business plan	13.802	13.269	12.763	12.092	11.636	63.562
Adjustments included in final determination						
Doubtful Debt	8.597	8.168	7.759	7.371	7.002	38.898
Debt management	1.300	1.235	1.173	1.115	1.059	5.881
input price pressure	0.000	0.000	0.000	0.000	0.000	0.000
Pension deficit repair costs	0.105	0.105	0.105	0.105	0.105	0.524
Adjustments included in final determination	10.002	9.508	9.037	8.590	8.166	45.303

Household retail revenue modification

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

Table AA2.3 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 AA2.4 sets out the baseline number of customers.

Table AA2.3 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	30.47	29.56	28.70	27.80	27.60
Unmetered wastewater only customer	30.47	29.56	28.70	27.80	27.60
Unmetered water and wastewater customer	39.61	38.42	37.31	36.14	35.88
Metered only water	38.98	37.44	35.92	34.34	34.17

Revenue modification per:	2015-16	2016-17	2017-18	2018-19	2019-20
customer					
Metered wastewater only customer	38.52	36.47	34.47	32.40	32.22
Metered water and wastewater customer	48.13	46.54	44.99	43.31	42.97

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

Table AA2.4 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	53.2	52.8	52.4	52.0	51.6
Unmetered wastewater only	58.3	57.9	57.5	57.1	56.7
Unmetered water and wastewater	688.9	671.8	655.1	638.8	623.0
Metered water only	26.1	27.0	27.8	28.7	29.6
Metered wastewater only	67.2	68.0	68.9	69.7	70.6
Metered water and wastewater	472.6	495.4	518.1	540.7	563.3

Annex 3 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 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 Dŵr Cymru 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 this final determination.

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 Dŵr Cymru's draft determination in these areas.

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 Dŵr Cymru, 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 Dŵr Cymru

Area	Respondent	Summary of comment	Ofwat response
Service standard outputs	Dŵr Cymru	The company provided evidence in its representation and subsequent responses to queries WSH/LEGACY/001 and 001a to confirm that the resilience service standard outputs have been achieved.	Having considered the evidence provided in the company's representation and responses to queries, we are satisfied that the service standard outputs have been achieved. There are therefore no changes for the final determination.
Serviceability performance	Dŵr Cymru	<p>The company considers that its water infrastructure serviceability is stable since the primary indicator (burst mains) is stable and that failure in one of the secondary measures such as interruptions to supply should not result in a less than stable assessment overall. The company provided evidence detailing trunk main bursts and interruption events and considers that the underlying performance in trunk main bursts is stable.</p> <p>The company provided evidence of the impact of adverse weather and considers that unplanned interruptions is a volatile indicator that does not demonstrate asset serviceability.</p> <p>The company considers that the DG3 reference levels and control limits for Dŵr Cymru are significantly different from the industry average</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>Our assessment of the company's specific representations, in relation to exclusions and mitigating circumstances for example, is set out in table AA3.12.</p>

Area	Respondent	Summary of comment	Ofwat response
		<p>and represent a more significant challenge to the limits set for other companies.</p> <p>The company explains there have been reporting and performance difficulties associated with the interruptions to supply serviceability indicator and proposes a shortfall of £7.5 million.</p>	
CIS	There are 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 minor change had no material impact of the final revenue adjustments.

Area	Respondent	Summary of comment	Ofwat response
Other adjustments	Dŵr Cymru	<p>2009-10 adjustment for actual expenditure in the opening RCV adjustment (water)</p> <p>The company made a case for increasing the 2009-10 adjustment to the RCV for the capex associated with cryptosporidium and THM schemes.</p> <p>2009-10 adjustment for actual expenditure in the opening RCV adjustment (wastewater)</p> <p>The company does not believe there should be a Current Cost Depreciation (CCD) adjustment in the calculation. The company has not amended the RCV feeder model. The company states there is a £2 million understatement for 2010-15 anaerobic digestion maintenance brought forward into 2009-10.</p>	<p>2009-10 adjustment for actual expenditure in the opening RCV adjustment (water)</p> <p>We consider these specific schemes arose due to inadequate maintenance. We do not accept that any change should be made as this would be a reopening of the PR09 determination.</p> <p>2009-10 adjustment for actual expenditure in the opening RCV adjustment (wastewater)</p> <p>The CCD adjustment is a continuation of the previous approach to capex outperformance and we do not accept that any change should be made as this would be a reopening of the PR09 determination.</p>

Summary of 2010-15 adjustments

All companies were required to consider in their business plans their 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 determinations. 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 Dŵr Cymru and outlines how our interventions have been influenced by our consideration of these responses.

The changes we have made in the final determination, compared to our draft determination, are due to changes in our serviceability shortfall and CIS methodologies, which we discuss in more detail in policy chapter A4.

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

	Water service		Wastewater service	
	Company view	Ofwat view	Company view	Ofwat view
SIM	1.610	2.978	1.975	3.866
RCM	18.225	17.594	16.715	15.514
OIA	0.000	0.000	0.000	0.000
CIS	-50.540	-51.344	-36.950	-37.223
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

	Water service		Wastewater service	
	Company view	Ofwat view	Company view	Ofwat view
Other adjustments	0.000	0.000	0.000	0.000
Total wholesale legacy adjustments	-30.705	-30.772	-18.260	-17.842

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 AA3.16. 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 A2.6 and table A3.6.

Totals may not add up due to rounding.

Adjustments by 2010-15 incentive mechanism

Service incentive mechanism

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

Table 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	0.322	0.322	0.322	0.322	0.322	1.610
	Ofwat view	0.596	0.596	0.596	0.596	0.596	2.978
Wastewater	Company view	0.395	0.395	0.395	0.395	0.395	1.975
	Ofwat view	0.773	0.773	0.773	0.773	0.773	3.866

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

Area of intervention	What we did	Why we did it
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Area of intervention	What we did	Why we did it
Methodology	Our final determination includes our view of the company's SIM reward, which we have calculated as 0.2%. The reward is unchanged from the draft determination.	To compare 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.

Revenue correction mechanism

We set out our view of the company's RCM annualised adjustment amounts in table AA3.5 below. Table AA3.6 summarises our interventions in relation to Dŵr Cymru's proposed RCM adjustments.

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, the updated PR14 discount rate is 3.6%. This explains the 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	3.645	3.645	3.645	3.645	3.645	18.225
	Ofwat view	3.519	3.519	3.519	3.519	3.519	17.594
Wastewater	Company view	3.343	3.343	3.343	3.343	3.343	16.715
	Ofwat view	3.103	3.103	3.103	3.103	3.103	15.514

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

Area of intervention	What we did	Why we did it
Revised RCM business plan tables	There were anomalies between the company's resubmitted data set, commentary and RCM model. We applied the company's resubmitted May 2014 tables in our final determination.	Following a query, the company resubmitted these tables to ensure alignment with its populated RCM model. However, the supporting commentary "Section 2 of 'SD5 – Further Information on Reconciling 2010-15 Performance'" had not been updated.
Number of households billed	We used the data the company submitted in business plan table R3 to calculate our view of the RCM adjustment.	There were inconsistencies with the number of households billed in 2013-14 and 2014-15 between business plan table R3 and the company's populated RCM spreadsheet. Our assumptions for the final determination apply the data from table R3.
FD09 assumptions – Measured Non-household's revenue for the Measured Non-household group immediately above and below the 250ML threshold	We included our view of the FD09 assumptions for the inputs to the RCM model. Our view of the company's revenue assumptions for the measured non-household group immediately below and above the 250 ML tariff basket threshold originate from the company's FD09 revenue forecasts that come from the tariff basket model, which we used for PR09.	There were differences between the company's and our view of the FD09 assumptions used in the 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 250ML threshold' compared with our view of its FD09 assumptions. 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-

Area of intervention	What we did	Why we did it
		15 performance’.
Outturn financial year average RPI	We applied the data that the company submitted in business plan table A9 to calculate our view of the RCM adjustment.	There were inconsistencies with the outturn financial year average RPI between table A9 and the RCM spreadsheet. Our assumptions for the final determination apply the data from table A9.

Operating expenditure incentive allowance

We are not making an adjustment for the OIA. The company has not sought an OIA claim in this area (this position is unchanged from the draft determination).

Change protocol (logging up, logging down and shortfalls)

Table AA3.7 and table AA3.8 below summarise Dŵr Cymru’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.

Table AA3.9 summarises our interventions in relation to Dŵr Cymru’s proposed change protocol adjustments.

There are no changes from our draft determination.

Table AA3.7 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	50.924	49.965	50.924	49.965
Logging down (two-sided)	0.000	-6.255	0.000	0.000	0.000	-6.255
Shortfalls (one-sided)	-6.255	0.000	0.000	0.000	-6.255	0.000

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 AA3.8 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	19.860	18.892	19.860	18.892
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 AA3.9 Interventions on proposed 2010-15 change protocol adjustments

Area of intervention	What we did	Why we did it
Meter maintenance shortfall	We accepted the company's pre-efficiency adjustments for this claim, but have treated this claim as a logging down item rather than a shortfall. For inclusion in our CIS reconciliation, we have applied the profile of FD09 non-infrastructure enhancement efficiencies to the annual adjustments.	We considered this to be a logging down item as it relates to activity that is no longer needed – a situation that could not have been known when we set prices at PR09.
Welsh Government mandatory build standards	We did not accept this claim.	The cost was less than 2% of the wastewater service turnover and so we considered this claim to be trivial.
Adoption of private sewers – opex	We accepted the company's pre-efficiency values, but applied the profile of FD09 enhancement efficiencies rather than FD09 base efficiencies.	At the private sewers workshop on 21 May 2012 we committed to treat private sewers capex to 2020 as 'enhancement' to reduce bill impacts in the short term. As we have applied enhancement efficiency to the company's logging up capex, for consistency, we have applied enhancement efficiency to the associated opex.

We have not intervened for the following claim: Habitats NEP (Logging up – sewerage service).

Service standard outputs

Service standards are regulatory outputs which we set out in the 2009 final determination (FD09) supplementary reports⁷. Where companies have not reported progress on these service standards before submitting business plans, we expected them to do so within the price review process.

We sent queries WSH/LEGACY/001 and 001a to Dŵr Cymru to understand its progress on these outputs. We have considered the evidence the company provided and consider that these outputs are either achieved or will be complete by the end of March 2015, as such, we have not applied a shortfall and have not intervened.

Serviceability performance

Table AA3.10 below summarises our serviceability assessments for Dŵr Cymru and table AA3.11 quantifies the value and impact of any serviceability shortfall on the RCV. Table AA3.12 summarises our interventions in relation to Dŵr Cymru's proposed adjustments for serviceability.

The changes we have made in the final determination compared to our draft determination, are due to changes in our serviceability shortfall methodology set out in policy chapter A4.

Table AA3.10 Serviceability assessments for 2010-15

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

⁷ 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."

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

Note:

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.

Table AA3.11 Impact of serviceability shortfalls on the RCV (£ million)

2009-10 to 2014-15		Water	Wastewater	Total
Amount subtracted from RCV	Company view (representation)	-7.2	0.0	-7.2
	Ofwat view	-12.6	0.0	-12.6

Table AA3.12 Interventions on proposed 2010-15 serviceability adjustments

Area of intervention	What we did	Why we did it
Unplanned interruptions to supply exceeding 12 hours	<p>For the purposes of the final determination we have applied a shortfall for deteriorating performance for this indicator.</p> <p>In accordance with our amended shortfall calculation methodology (see policy chapter A4), the shortfall applied for the years 2011-12, 2012-13, 2013-14 and 2014-15 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 company proposed a shortfall of £7.2 million (post efficiency), however</p>	<p>The company has had three breaches of the upper control limit in 2011-12, 2012-13 and 2013-14. The 2014-15 forecast is also above the upper control limit. We have considered the company's representation and its proposal for a reduced shortfall of £7.2 million (post efficiency). We consider this value does not sufficiently represent the scale of failure. We have also excluded from the performance an incident that took place in 2014 resulting in 1,891 properties being interrupted for more than 12 hours – we agree with the company that the incident could</p>

Area of intervention	What we did	Why we did it
	<p>the value of the applied shortfall adjustment is £12.6 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>Our final determination shortfall is £19.7 million lower than the shortfall we applied at the draft determination.</p>	<p>not have been foreseen and was out of its direct control. However, despite the application of this exclusion, performance in 2013-14 remains above the upper control limit and the 1 standard deviation cap. Therefore the exclusion has no impact on the value of the shortfall.</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 AA3.13 below confirms Dŵr Cymru's proposed transition programme. There are no interventions in this area.

Table AA3.13 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	2.6	1.7%	0.4%
Wastewater service	3.4	2.2%	0.4%

Capital expenditure incentive scheme

Table AA3.14 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 AA3.15 then sets out the profiled values of the revenue adjustments in each year 2015-20, table AA3.16 shows the components of the opening RCV which are included in the CIS adjustment, and table AA3.17 summarises our interventions in relation to Dŵr Cymru's proposals.

There are no representations in this area from Dŵr Cymru. 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. This change in our methodology has increased the final determination revenue by £2.5m.

Table AA3.14 CIS true-up adjustments

		Water service	Wastewater service	Total service
Restated FD09 CIS bid ratio ¹	Company view	105.861	105.357	N/a
	Ofwat view	105.860	105.499	N/a
Out-turn CIS ratio	Company view	138.004	119.609	N/a
	Ofwat view	137.342	119.193	N/a
Incentive reward/penalty (%) ²	Company view	-10.279	-5.466	N/a
	Ofwat view	-10.100	-5.330	N/a
Reward/penalty (£m)	Company view	-55.044	-33.582	-88.625
	Ofwat view	-54.338	-32.856	-87.193
Adjustments to 2015-20 revenue (£m) ³	Company view	-47.058	-34.405	-81.463
	Ofwat view	-47.898	-34.724	-82.622
CIS adjustment to RCV (£m) ⁴	Company view	157.956	120.443	278.400
	Ofwat view	157.931	120.421	278.352

Notes:

1. The restated FD09 CIS bid ratio takes account of the adjustments for the change protocol (table AA3.5)
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 AA3.16 we show how the components of this agree to those shown in table A2.6 and table A3.6.

Table AA3.15 Profiled revenue adjustments from the CIS reconciliation (£ million)

		2015-16	2016-17	2017-18	2018-19	2019-20	Total
Water	Company view	-10.108	-10.108	-10.108	-10.108	-10.108	-50.540
	Ofwat view	-10.269	-10.269	-10.269	-10.269	-10.269	-51.344
Wastewater	Company view	-7.390	-7.390	-7.390	-7.390	-7.390	-36.950
	Ofwat view	-7.445	-7.445	-7.445	-7.445	-7.445	-37.223

Table AA3.16 CIS components of the opening RCV adjustment (£ million)

	Water service	Wastewater service
Adjustment for actual expenditure 2010-15	164.186	70.456
Net adjustment from logging up and logging down	-6.255	49.965
Adjustment for shortfalls	0.000	0.000
RCV adjustment	157.931	120.421

Table AA3.17 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. The company used the PR09 pre-tax cost of debt as the discount rate when calculating the future value of the revenue adjustment.
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 our published methodology.

Area of intervention	What we did	Why we did it
Data inconsistencies	In carrying out our assessment, we have used the values from business plan tables A9.	We identified minor inconsistencies between the revised business tables and the company's populated CIS model on the RPI and COPI financial year values for 2013-14 and 2014-15.

Other adjustments

We have not made any revenue adjustments in our final determination for:

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

There are no changes from our draft determination and there are no interventions in this area.

Table AA3.18 and table AA3.19 below confirm the assumptions included in this final determination with respect to other adjustments to the opening RCV.

There is a minor change from our draft determination in relation to our adjustment for actual expenditure in 2009-10.

Table AA3.18 Other adjustments to the opening RCV (£ million)

	Water service		Wastewater service	
	Company view	Ofwat view	Company view	Ofwat view
Land sales	0.500	0.283	1.100	0.655
2009-10 adjustment	22.600	13.725	41.200	39.570
Other adjustments	0.000	0.000	0.000	0.000

Table AA3.19 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.
2009-10 adjustment	We calculated the 2009-10 adjustment using the capex figures from the June return.	This provided a consistent approach with all companies.

Annex 4 Outcomes, performance commitments and outcome delivery incentives

We set out our methodology for performance commitments and outcome delivery incentives (ODIs) in policy chapter A2.

In this annex we provide an overview of the performance commitments and ODIs for Dŵr Cymru. We then set out in detail these performance commitments and ODIs for the company's wholesale water, wholesale wastewater, household retail and non-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 their 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.

However, we first consider the responses to our draft determinations in relation to the performance commitments and ODIs for Dŵr Cymru.

Consideration of representations on our draft determinations

In line with our 'equivalence of treatment' principle, Dŵr Cymru is subject to changes we have made to outcomes following detailed comparisons of similar outcome proposals put forward by companies (that is: our comparative assessment comparative assessments).

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.

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 performance

commitments and ODIs for Dŵr Cymru, 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 determinations as a result of comparative assessment 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 determinations as a result of our company specific assessments for wholesale water and wholesale wastewater respectively.
- Table AA4.5 considers representations received on the interventions we proposed in our draft determinations as a result of our company specific assessments for household retail.
- Table AA4.6 considers representations received on the interventions we proposed in our draft determinations as a result of our company specific assessments for non-household retail.
- Table AA4.7 lists the performance commitments that were proposed by companies but that have been removed as part of our final determination.
- Table AA4.8 lists performance commitments 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.

Overall, Dŵr Cymru considers that we should:

- clarify that some of its performance commitments and outcome delivery incentives are measured on a three year rolling average; and
- state that rewards and penalties will not be applicable where restitution have been made or compensation have been paid via other routes in order to prevent double jeopardy.

We have accepted a three-year average, where proposed, for some of the company's performance commitments. We also accept its position on double jeopardy in principle, but expect the company to clearly explain why an incentive should not apply in the event that it feels double jeopardy would occur.

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

PC/ODI affected	What we did at draft determination/ subsequent comparative assessment	Representations	What we did at final determination	Why we did it
A1 – safety of drinking water	<p>We removed the reward as we considered it not appropriate to earn a reward for a statutory obligation.</p> <p>We changed the penalty to a unit rate as we considered this would give the company a better incentive to improve.</p>	<p>The company stated that Ofwat’s proposal to remove the reward for safe drinking water runs counter to the April customer research findings, and will be looking to resolve this uncertainty with the further analysis it undertook between the draft and final determination.</p> <p>The company stated that the relevant measure should be a three year rolling average.</p> <p>The company stated that it would prefer the incentive rate to be written as £2.5m per 0.01% rather than £250m per 1% as this will reduce the risk of a stakeholder misrepresenting the scale of the penalty.</p>	<p>We maintained our intervention to remove the proposed reward.</p> <p>We intervened in accordance with our comparative assessment by setting the CPL at 100% and deadband at 99.95%.</p> <p>We intervened so that this PC’s performance will be measured and incentivised annually.</p> <p>Changed the representation of the incentive rate to be £2.5m per 0.01%.</p>	<p>Earning rewards for a statutory obligation is not appropriate.</p> <p>See policy chapter A2 for further explanation.</p> <p>The DWI has measured performance annually in the past and we consider that it is appropriate to continue measuring performance annually.</p> <p>We consider that annual measurement and incentives will better protect customers against non-delivery and provide appropriate incentives to the company to deliver.</p> <p>As suggested by the company, expressing the</p>

PC/ODI affected	What we did at draft determination/ subsequent comparative assessment	Representations	What we did at final determination	Why we did it
				incentive rate as £2.5m per 0.01% makes the company's actual performance clearer.
A2 – customer acceptability	<p>Changed from non-financial incentive (NFI) to penalty-only.</p> <p>Set deadbands and penalty collars in line with our comparative assessments.</p> <p>Established a maximum penalty of £3.5m, based on incremental totex.</p>	<p>The company stated that Ofwat set penalty rates based on incremental totex figures, as submitted in tables W1 and S1. But this does not take into account that these are allocations, not strict estimates of incremental expenditure. The company is therefore questioning the size of some of these adjustments.</p> <p>The company does not agree with the introduction of additional penalties alongside that which the DWI can impose for customer acceptability (drinking water).</p> <p>The company considers that</p>	<p>We intervened in accordance with our comparative assessment by setting the penalty deadband at 1.23, collar at 1.43, reward deadband at 1.23 and cap at 1.03 from 2017-18.</p> <p>We set the CPLs in 2015-16 and 2016-17 at 2.54 and 1.89 to offer a glide-path to upper quartile performance in 2017-18.</p> <p>We set the penalty deadbands in 2015-16 and 2016-17 at 3.20, the 2014-15 level of performance.</p> <p>We introduced a reward in all years for performance that is</p>	<p>We consider that a financial incentive will offer sufficient protection to customers against non-delivery and provide appropriate incentives to the company to deliver.</p> <p>The company's performance is not at upper quartile and therefore we intervened to incentivise to the company to reach upper quartile performance.</p> <p>See policy chapter A2 for further explanation.</p> <p>All other companies' standalone PCs on water quality contacts are</p>

PC/ODI affected	What we did at draft determination/ subsequent comparative assessment	Representations	What we did at final determination	Why we did it
		<p>the relevant measure should be a three year rolling average.</p> <p>The company stated in its representations of July 2014 that it would carry out research to obtain customer views on an ODI reward. It submitted the results of this research in its draft determination representations of October 2014. The research showed that its customers supported a reward.</p>	<p>at or better than the upper quartile of 1.23. We intervened so that this PC's performance will be measured and incentivised annually.</p> <p>We assessed Dŵr Cymru's case for including a reward at the same rate as its penalty of £9.3m/1.00 contacts/1,000 population, and accepted it.</p>	<p>measured annually. We therefore intend to measure Dŵr Cymru's PC in the same way.</p> <p>A majority of Dŵr Cymru's surveyed customers indicated it was acceptable to link bills to improvements, at a level of reward symmetrical to the penalty.</p>
A3 – reliability of supply	Set a PC level of 10 minutes and a penalty collar of 20 minutes from 2017-18 onwards.	<p>The company considered that the relatively limited interconnectivity of its network impacts its performance for this commitment – it identified this as a company specific factor.</p> <p>It proposed an overall target</p>	<p>In line with our comparative assessment, we set a PC level of 12 minutes from 2017-18, with a penalty collar of 32 minutes and a reward cap of 0 minutes.</p> <p>We set the CPLs in 2015-16 and 2016-17 at 36 and 24 to</p>	<p>The company's performance is not at upper quartile and therefore we intervened to incentivise the company to reach upper quartile performance.</p> <p>We introduced a reward in response to the company-</p>

PC/ODI affected	What we did at draft determination/ subsequent comparative assessment	Representations	What we did at final determination	Why we did it
		<p>for the last three years of AMP6 of 25.4 minutes.</p> <p>It also proposed to widen the deadband range for each year of AMP6 from 10 minutes to 20 minutes, which results in a penalty rate of £0.195m per minute per property to keep the maximum penalty the same.</p>	<p>offer a glide-path to upper quartile performance in 2017-18.</p> <p>We set the penalty deadbands in 2015-16 and 2016-17 at 48, the 2014-15 level of performance.</p> <p>We introduced a reward in all years for performance that is at or better than the upper quartile of 12.</p> <p>We accepted the company's revised penalty rate of £0.195m/minute/property.</p> <p>We set the reward rate equal to the penalty rate.</p>	<p>specific factor concerning the impact of network interconnectivity on supply interruptions that Dŵr Cymru set out in its representations. Generally, the companies' customers supported rewards that are symmetrical with penalties.</p> <p>See policy chapter A2 for further explanation.</p>

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

PC/ODI affected	What we did at draft determination/ subsequent comparative assessment	Representations	What we did at final determination	Why we did it
B3 – preventing pollution	<p>Changed the PC levels, caps, collars and deadbands to reflect the inclusion of transferred assets.</p> <p>Changed the penalty and reward to unit rates to £0.4m and £0.047m respectively from their previous lump sums of £10m each.</p>	<p>The company accepts that the performance commitment should include incidents from transferred assets in principle, but is proposing minor alterations to Ofwat’s proposed performance profile. The company has proposed a performance level of 137 in 2019-20 compared with our intervention of 131.</p> <p>The company’s preference is that this measure should be based on a three year rolling average performance.</p> <p>The company stated in its representations of July 2014 that it did not have sufficient evidence to justify the inclusion of a reward but would undertake further</p>	<p>We intervened in line with our comparative assessments.</p> <p>We intervened to define the performance commitment as the reduction in category 3 pollution incidents only.</p> <p>We set a PC level of 131 pollution incidents from 2017-18, with a penalty collar of 156 and a reward cap of 106.</p> <p>We set the CPLs in 2015-16 and 2016-17 at 161 and 154 to offer a glide-path to upper quartile performance in 2017-18.</p> <p>We set the penalty deadbands in 2015-16 and 2016-17 at 224, the 2014-15 level of performance.</p> <p>We introduced a reward in all</p>	<p>The company’s performance is not at upper quartile and therefore we intervened to incentivise the company to reach upper quartile performance.</p> <p>All other companies’ PC levels are annual, not three year averages, therefore we have adopted a consistent approach for Dŵr Cymru.</p> <p>A majority of Dŵr Cymru’s surveyed customers indicated it was acceptable to link bills to improvements, at a level of reward symmetrical to the penalty.</p> <p>We consider that the company should not receive any reward for reducing serious pollution incidents. It</p>

PC/ODI affected	What we did at draft determination/ subsequent comparative assessment	Representations	What we did at final determination	Why we did it
		<p>customer research. It submitted the results of this research in its draft determination representations of October 2014. The research indicated customer support for a reward.</p> <p>Natural Resources Wales (NRW) would like to see category 1 and 2 (serious) pollution incidents separated from category 3. It would like to see a target of zero for serious pollution incidents, in line with other companies. It disagrees with the company's proposed incentive (reward) for reduced pollution incidents, as it believes pollution reduction should be firmly embedded in the values of the company.</p>	<p>years for performance that is at or better than the upper quartile of 131.</p> <p>We intervened so that this PC's performance will be measured and incentivised annually.</p> <p>We assessed Dŵr Cymru's case for a reward at £0.047m per incident, and accepted it. We left the penalty rate unchanged at £0.400m per incident.</p>	<p>is incentivised to reduce category 1 and 2 incidents through NRW legal action.</p> <p>See policy chapter A2 for further explanation.</p>
D3 –	Included properties flooded	The company accepted that	Accept Dŵr Cymru's	Dŵr Cymru is currently

PC/ODI affected	What we did at draft determination/ subsequent comparative assessment	Representations	What we did at final determination	Why we did it
<p>properties flooded in the year</p>	<p>from transferred assets in the performance commitment.</p> <p>Changed the penalty and reward rates from lump sums of £10m to unit rates of £0.161m/property and £0.062m/property.</p> <p>Changed the PC levels, caps, collars and deadbands to account for transferred assets.</p> <p>Reduced the reward rate.</p>	<p>the definition of performance commitments for properties flooded should include private sewers transferred to the company, but is proposing alterations to Ofwat’s proposed performance profile to take account of issues such as the different trends in hydraulic overload and flooding (other causes).</p> <p>The company’s preference is that this measure should be based on a three year rolling average performance.</p> <p>The company stated in its representations of July 2014 that it did not have sufficient evidence to support the reward rate but would undertake further customer research. It submitted the results of this research in its</p>	<p>proposed performance profile. We intervened so that this performance commitment will be measured and incentivised annually.</p> <p>Retained the reward at the reduced rate of £0.062m/property.</p>	<p>performing at the upper quartile level so we have not intervened.</p> <p>All other companies’ PC levels are annual, not three year averages, therefore we have adopted a consistent approach for Dŵr Cymru.</p> <p>Dŵr Cymru’s customer research showed that its customers support the reward at the reduced rate.</p> <p>See policy chapter A2 for further explanation.</p>

PC/ODI affected	What we did at draft determination/ subsequent comparative assessment	Representations	What we did at final determination	Why we did it
		draft determination representations of October 2014. The research indicated customer support for a reward at the level of £0.062m per property.		

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
F2 – leakage	Changed the penalty to a unit rate per MI/day. Increased the maximum annual penalty from £5m to £9.2m.	The company found that 59% of the customers it sampled in its research supported linking bills to leakage performance. Consequently, it believes that there is a case for a reward, but at a lower rate than the £1.84m penalty rate it asked its customers about. Instead of the £1.84m per MI/d used for penalties, it proposed a	Assessed Dŵr Cymru’s case for a reward and allowed it.	There is significant customer support for a reward and, given that the reward rate is half the penalty rate, customers are adequately protected.

PC/ODI affected	What we did at draft determination	Representations	What we did at final determination	Why we did it
		reward rate half this level, at £0.92m per Ml/d. It also proposed symmetry in deadbands and collars.		
F3 – asset resilience	Increased maximum annual penalty from £0.5m to £3.1m.	<p>The company states that the penalty exposure should revert to what it proposed in its business plan submission.</p> <p>The company stated that it did not have sufficient evidence to justify the inclusion of a reward but would undertake further customer research. It submitted the results of this research in its draft determination representations. The research showed a majority of customers (69%) supported the linking of bills to this performance measure in principle, but only 47% felt that the proposed level of reward was appropriate.</p>	<p>We maintained our intervention on the penalty rate.</p> <p>We further intervened to make the penalty a variable one, with a total penalty of £15.5m applying over the range between the company's 2019-20 penalty deadband and collar, that is, 80% to 85% of critical assets that are resilient against a set of criteria. The penalty rate per % is therefore $\text{£}15.5\text{m}/(85-80) = \text{£}3.1\text{m}$.</p> <p>We did not accept the company's proposed reward.</p>	<p>Our methodology states penalties should be based on incremental totex (and customers' WTP, if available). The company's proposed penalty was not consistent with our methodology, as it was not based on incremental totex and customers' WTP, despite these being known.</p> <p>The company has not provided sufficiently strong evidence that a reward is appropriate.</p>

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
C1 – adapting to climate change	<p>Change the PC from NFI to penalty-only.</p> <p>Established a maximum annual penalty of £4.5m, based on incremental totex.</p>	<p>The company states that Ofwat has adjusted its penalty rates on the basis of incremental totex figures, as submitted in tables W1 and S1. The company states that this has been done in a way that appears to overlook the fact that these are allocations, not strict estimates of incremental expenditure. The company therefore questions the size of some of these adjustments.</p> <p>The company states that it does not agree with the introduction of additional penalties for responding to climate change.</p> <p>The company states that there is an error in the DD around profiling which needs to be corrected. The penalty</p>	<p>We maintained our intervention to make this a penalty-only ODI.</p> <p>We maintained our intervention on the penalty.</p> <p>We changed the penalty collar from 10,000 to 1,000.</p>	<p>We stated in our ODI methodology that penalties should be based on incremental totex (and customers' WTP, if available).</p> <p>We corrected the error, highlighted by the company, which we had made in the penalty collar in the draft determination.</p>

PC/ODI affected	What we did at draft determination	Representations	What we did at final determination	Why we did it
		collar for 2016-17 should read 1,000 rather than 10,000.		
F3 – asset resilience	We increased the maximum annual penalty from £0.5m to £2.2m.	<p>The company states that the penalty exposure should revert to what it proposed in its business plan submission.</p> <p>The company stated that it did not have sufficient evidence to justify the inclusion of a reward but would undertake further customer research. It submitted the results of this research in its draft determination representations. The research showed a majority of customers (69%) supported the linking of bills to this performance measure in principle, but only 47% felt that the proposed level of reward was appropriate.</p>	<p>We maintained our intervention on the penalty rate.</p> <p>We further intervened to make the penalty a variable one, with a total penalty of £11.0m applying over the range between the company's 2019-20 penalty deadband and collar, that is, 71% to 76% of critical assets that are resilient against a set of criteria. The penalty rate per % is therefore $\text{£}11.0\text{m}/(76-71) = \text{£}2.2\text{m}$.</p> <p>We did not accept the company's proposed reward.</p>	<p>Our methodology states penalties should be based on incremental totex (and customers' WTP, if available). The company's proposed penalty was not consistent with our methodology, as it was not based on incremental totex and customers' WTP, despite these being known.</p> <p>The company has not provided sufficiently strong evidence that a reward is appropriate.</p>
B2 – treating used water	No intervention.	Natural Resources Wales's expectation is that companies	Intervened to set PC level at 100% compliance from 2015-	Compliance with wastewater discharge permits is a

PC/ODI affected	What we did at draft determination	Representations	What we did at final determination	Why we did it
		will set PC levels of 100% for all environmental statutory obligations.	16.	statutory obligation and therefore a target of 100% is appropriate.

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
None	N/a	N/a	N/a	N/a

Table AA4.6 Representations specific to the company specific assessments on non-household retail

PC/ODI affected	What we did at draft determination	Representations	What we did at final determination	Why we did it
D4 – non-household customer satisfaction	We changed the penalty to a unit rate per percentage.	CCWater sought a stronger incentive.	We maintained our intervention from the draft determination.	We consider that the company's maximum penalty is sufficient and should be applied equally across the penalty range.

Table AA4.7 Performance commitments proposed by the company that we have removed from this final determination

Performance commitment	Reason for its removal
Wholesale water: G1 – health and safety G2 – competence for role H1 – operating efficiency H2 – financing efficiency Wholesale sewerage: G1 – health and safety G2 – competence for role H1 – operating efficiency H2 – financing efficiency Household retail: G1 – health and safety G2 – competence for role Non-household retail: H1 – operating efficiency	We removed all of these PCs at draft determination as they related to internally focused outputs, rather than customer-focused outcomes. The company has accepted their removal.

Table AA4.8 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	Non-household retail
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Wholesale water	Wholesale wastewater	Household retail	Non-household retail
<p>C2 – reducing our carbon footprint</p> <p>D1 – SIM</p> <p>D2 – “at risk” customer services</p> <p>D5 – earning the trust of customers</p> <p>E1 – affordable bills</p> <p>F1 – asset serviceability</p>	<p>C2 – reducing our carbon footprint</p> <p>D1 – SIM</p> <p>D2 – “at risk” customer services</p> <p>D5 – earning the trust of customers</p> <p>E1 – affordable bills</p> <p>F1 – asset serviceability</p>	<p>D1 – SIM</p> <p>D5 – earning the trust of customers</p> <p>E1 – affordable bills</p> <p>E2 – help for disadvantaged customers</p>	

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 outcome delivery incentives. 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.

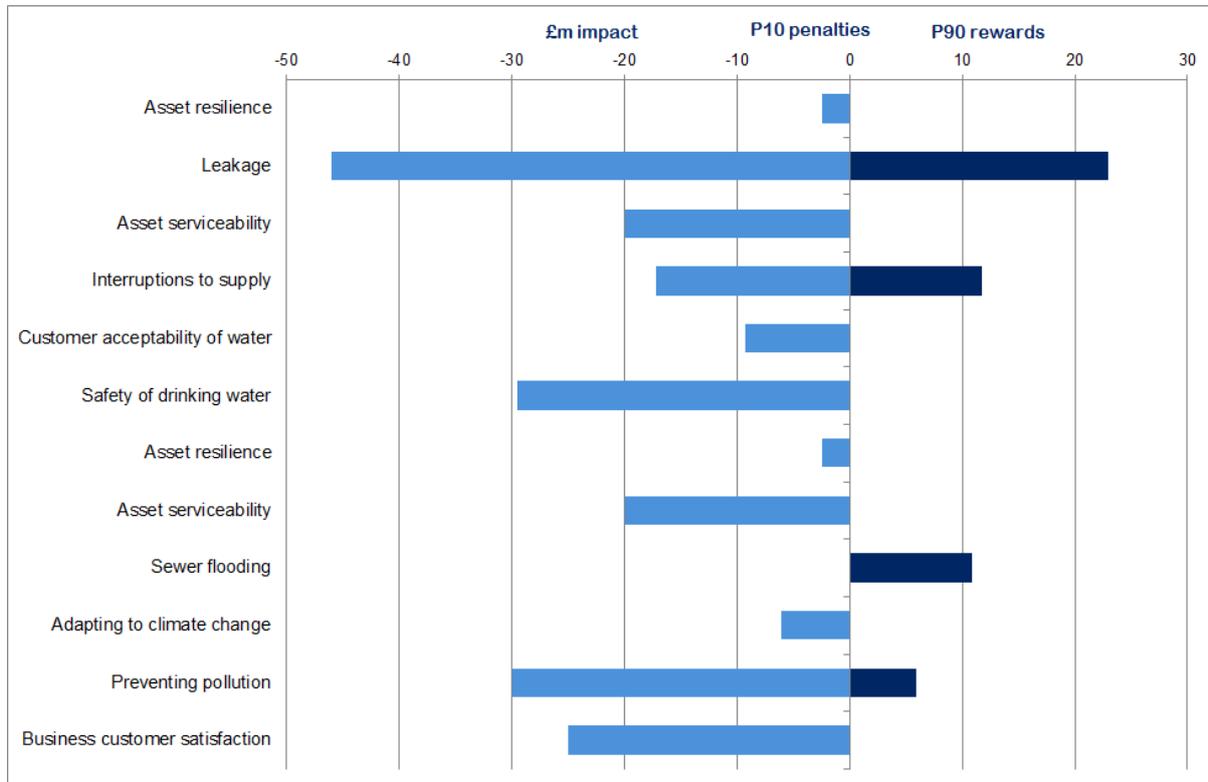
Below, we provide an overview of the performance commitments and outcome delivery incentives. Table AA4.9 shows the balance between reward and penalty, penalty only and reputational incentives in the package of incentives for the company.

Table AA4.9 The composition of the package of ODIs

	Reward and penalty	Penalty only	Non-financial incentive
Wholesale water	4	3	5
Wholesale wastewater	3	3	5
Household retail	1	0	3
Non-household retail	1	1	2
Total	9	7	15

Figure AA4.1 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



As explained in the policy chapter A2, we are introducing an aggregate cap on rewards and collar on penalties from the outcome delivery incentives. Details of how the cap/collar will operate are set out in section A2.6 of the policy chapter A2.

There are no specific exclusions from the cap and collar for Dŵr Cymru, though under our 'equivalence of treatment' principle it is subject to the cap and collar.

In the remainder of this chapter, we provide the following information on each performance commitment we are confirming as part of this final determination:

- the name and detailed definition of the performance commitment;
- the type of incentive;
- the performance commitment level;
- for financial incentives:
 - the limits on rewards and penalties (caps and collars) and neutral zones (deadbands) as applicable⁸; and

⁸ 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.

- 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.

Performance commitments and ODIs in detail

Wholesale water outcome 1: Safe drinking water

Performance commitment A1: Safety of drinking water

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

Incentive type: Financial – penalty only

Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	%	99.98	99.98	99.98	100.00	100.00	100.00
Penalty collar	%		99.91	99.91	99.91	99.91	99.91
Penalty deadband	%		99.95	99.95	99.95	99.95	99.95

Incentive rates

Incentive type	Incentive rate (£m/0.01%/year)
Penalty	2.5

Additional details

Necessary detail on measurement units	Compliance with the Drinking Water Inspectorate (DWI) regulations as measured by mean zonal compliance (MZC).
Frequency of PC measurement and any use of averaging	Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report.'

Timing and frequency of rewards/penalties	In the event that a price control penalty (or reward) is applied it will be spread over the remaining years of the price control period.
Form of reward/penalty	Revenue adjustment
Any other information or clarifications relevant to correct application of incentive	<p>£10m annual penalty payable pro rata to performance between the collar and deadband. This is equivalent to £2.5m per 0.01% per year.</p> <p>Failure of this measure would have a large reputational impact and the possibility of a fine imposed by the Regulator.</p> <p>In the event of a price control penalty applying, the amount paid by way of compensation to customers will be taken into consideration, and the price control penalty will be net of these payments.</p>

Performance commitment A2: Customer acceptability (drinking water)

Detailed definition of performance measure: The number of contacts received from customers in the calendar year regarding the appearance, taste or odour of drinking water per 1,000 population served

Incentive type: Financial – reward and penalty

Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	Contacts per 1,000 population	3.20	2.54	1.89	1.23	1.23	1.23
Penalty deadband	Contacts per 1,000 population		3.20	3.20	1.23	1.23	1.23
Penalty	Contacts		3.40	3.40	1.43	1.43	1.43

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
collar	per 1,000 population						
Reward deadband	Contacts per 1,000 population		1.23	1.23	1.23	1.23	1.23
Reward cap	Contacts per 1,000 population		1.03	1.03	1.03	1.03	1.03

Incentive rates

Incentive type	Incentive rate (£m/1.00 contacts/1,000 population)
Penalty	9.3
Reward	9.3

Additional details

Necessary detail on measurement units	The Drinking Water Inspectorate, a regulator dedicated solely to the objective of drinking water quality, monitors the company's performance closely and reports publicly on its performance along with other companies.
Frequency of PC measurement and any use of averaging	Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report.'
Timing and frequency of rewards/penalties	Annual
Form of reward/penalty	Unit rate of £9.3m per 1.0 contacts per 1,000 population. This is equivalent to £0.093m per 0.01 contacts per 1,000 population.
Any other information or clarifications relevant to correct application of incentive	

Performance commitment A3: Reliability of supply

Detailed definition of performance measure: Average minutes of supply interruption per property within our supply area (includes both planned and unplanned interruptions) as defined for the Ofwat key performance indicator (KPI) in IN 13/03

Incentive type: Financial – reward and penalty

Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	Minutes/property	48	36	24	12	12	12
Penalty collar	Minutes/property		68	68	32	32	32
Penalty deadband	Minutes/property		48	48	12	12	12
Reward deadband	Minutes/property		12	12	12	12	12
Reward cap	Minutes/property		0	0	0	0	0

Incentive rates

Incentive type	Incentive rate (£m per minute)
Penalty	0.195
Reward	0.195

Additional details

<p>Necessary detail on measurement units</p>	<p>As per Ofwat KPI – Water supply Interruptions in IN 13/03 Number of minutes lost due to water supply interruptions (planned and unplanned) for three hours or longer, per property served</p>
<p>Frequency of PC measurement and any use of averaging</p>	<p>Performance commitment measured and reported on an annual basis through the company’s ‘Annual Service and Outcome Delivery Report.’</p>
<p>Timing and frequency of rewards/penalties</p>	<p>Annual</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>£0.195m per minute applies between penalty deadband and collar, and reward deadband and cap.</p> <p>Number of minutes lost per property served in the year with supply interruption greater than three hours (irrespective of whether it was planned, unplanned or caused by a third party).</p> <p>Per property served is the number of connected properties (domestic and non-domestic) for water supply. This includes properties which are connected but not billed (for example, temporarily unoccupied) but excludes properties which have been permanently disconnected.</p> <p>A group of properties supplied by a single connection should be counted as multiple properties. They should only be treated as a single property if a single bill covers all properties in the group.</p>

Wholesale water outcome 2: Protecting our environment

Performance commitment B1: Abstraction for water for use

Detailed definition of performance measure: Percentage compliance with our abstraction licences, as regulated by Natural Resources Wales

Incentive type: Reputational

Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	%	100	100	100	100	100	100

Additional details

Necessary detail on measurement units	The company will report on the % of our abstraction licenses that it is compliant with in each calendar year.
Frequency of PC measurement and any use of averaging	Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report.'
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	

Wholesale water outcome 3: Responding to climate change

Performance commitment C2: Carbon footprint

Detailed definition of performance measure: The total GWh of renewable energy generated within the year

Incentive type: Reputational

Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	GWh	7.11	7.11	9.78	12.45	15.11	17.78

Additional details

Necessary detail on measurement units	GWh of renewable energy generated within the year.
Frequency of PC measurement and any use of averaging	Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report.'
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	The company will increase its renewable energy production capacity by focusing on such initiatives as hydro generation, solar photo-voltaic and expanding its anaerobic digestion capacity. This is part of the company's commitment to reduce its carbon footprint.

Wholesale water outcome 4: Best in class customer service

Performance commitment D1: Service incentive mechanism

Detailed definition of performance measure: SIM score as defined in Ofwat's SIM guidance April 2012 and updated by IN 13/03

Incentive type: Financial – reward and penalty

Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	Industry score	Top quartile	Top quartile	Top quartile	Top quartile	Top quartile	Top quartile
Penalty collar	Industry score		Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology
Penalty deadband	Industry score		Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology
Reward deadband	Industry score		Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology
Reward cap	Industry score		Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology

Incentive rates

Incentive type	Incentive rate
Penalty	Ofwat-led price control adjustments that are implemented at price reviews.
Reward	Ofwat-led price control adjustments that are implemented

Incentive type	Incentive rate
	at price reviews.

Additional details

Necessary detail on measurement units	All companies report and Ofwat publish annually the industry SIM scores.
Frequency of PC measurement and any use of averaging	Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report.'
Timing and frequency of rewards/penalties	While Ofwat has confirmed that it will continue to use SIM, the detail as to how individual companies will be penalised or rewarded at the end of the period is to be determined. The mechanism that will be put in place by Ofwat when it reviews the current arrangements will determine the value of the penalty or reward.
Form of reward/penalty	Revenue adjustment.
Any other information or clarifications relevant to correct application of incentive	Performance levels are set and shown on a company wide basis.

Performance commitment D2: 'At risk' customer services

Detailed definition of performance measure: The number of customers who are on our register of "at risk" at the end of the financial year. They are deemed to be "at risk" because their service has repeatedly fallen short in one of the following five areas: discolouration of water, interruptions to supply, low pressure, odour from wastewater assets, and sewer flooding

Incentive type: Reputational

Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	Properties/ incidents on internal register	850	850	750	650	550	425

Additional details

Necessary detail on measurement units	The measure is the number of customers on the “at risk” register. The register records the customers who have contacted us at least once in each of the previous three years in respect of (discolouration of water, interruptions to supply and odour), plus customers on the DG2 register without sufficient remedial action for at least the last three years and customers who have experienced internal sewer flooding in the previous year and at least once in the preceding ten years (internal or external, hydraulic overload or other causes).
Frequency of PC measurement and any use of averaging	Performance commitment measured and reported on an annual basis through the company’s ‘Annual Service and Outcome Delivery Report.’
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	Performance levels are set and shown on a company-wide basis.

Performance commitment D5: Earning the trust of customers

Detailed definition of performance measure: This measure is derived from the output of an annual survey of our customers. The measure is the percentage of customers who confirm they trust us

Incentive type: Reputational

Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	%	63	63	66	68	71	75

Additional details

Necessary detail on measurement units	The measure will be derived from the results of an annual survey.
Frequency of PC measurement and any use of averaging	Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report.'
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	Performance levels are set and shown on a company-wide basis.

Wholesale water outcome 5: Affordable prices

Performance commitment E1: Affordable bills

Detailed definition of performance measure: The extent to which the company will continue to make bills more affordable. After 2014-15 the company proposes that customer bill increases will be 1% below the rate of inflation each year

Incentive type: Reputational

Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC		Below inflation	1% below inflation	1% below inflation	1% below inflation	1% below inflation	1% below inflation

Additional details

Necessary detail on measurement units	Maintain falling bills in real terms, beating inflation by at least 1% a year.
Frequency of PC measurement and any use of averaging	Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report.'
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	Performance levels are set and shown on a company-wide basis.

Wholesale water outcome 6: Asset stewardship

Performance commitment F1: Asset serviceability

Detailed definition of performance measure: Serviceability assessment of either stable/marginal/deteriorating as defined within the Ofwat KPI, as set out in IN 13/03

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	Stable
Penalty collar			Deterio- rating	Deterio- rating	Deterio- rating	Deterio- rating	Deterio- rating
Penalty deadband			Marginal	Marginal	Marginal	Marginal	Marginal

Incentive rates

Incentive type	Incentive rate (£m/category/year)
Penalty	£20 million maximum penalty (£2.5 million per failure. See table below for more details.)

Additional details

Necessary detail on measurement units	Measurement based on serviceability assessment criteria as defined for the Ofwat KPIs in 'Key performance indicators – guidance, IN 13/03
Frequency of PC measurement and any use of averaging	Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report'
Timing and frequency of rewards/penalties	Penalty applied at end of period. A maximum £20m penalty will apply (£2.5m per sub-service failure) if serviceability is marginal or deteriorating in any consecutive two year period

Form of reward/penalty	Revenue adjustment						
Any other information or clarifications relevant to correct application of incentive	Penalty applies in the second year for which serviceability is marginal or deteriorating on one or more of the two water sub-services. The table below gives two illustrative examples for how this will operate:						
		Year 1	Year 2	Year 3	Year 4	Year 5	Penalty
Water non-infra	S	M	S	M	S	Total £0m	
Water infra	S	M	M £2.5m	M £2.5m	M £2.5m	Total £7.5m	
S = stable M = marginal							

Water infrastructure serviceability – reference levels and control limits

Composite Index					Committed performance levels				
					2015-16	2016-17	2017-18	2018-19	2019-20
Sub measure	Unit	2014-15	Limits	AMP5	Stable	Stable	Stable	Stable	Stable
Total bursts (nr)	Nr		Ref	4350	4350	4350	4350	4350	4350
			High	4713	4713	4713	4713	4713	4713
			Low	3987	3987	3987	3987	3987	3987
Interruptions >12h (nr)	Nr		Ref	93	93	93	93	93	93
			High	298	298	298	298	298	298
			Low	0	0	0	0	0	0
Iron non-compliance (as 100-Mean Zonal Compliance) (%)	%	0.20	Ref	0.30	0.30	0.30	0.30	0.30	0.30
			High	0.64	0.64	0.64	0.64	0.64	0.64
			Low	0.00	0.00	0.00	0.00	0.00	0.00
DG2 Pressure (nr)	Nr	131	Ref	220	220	220	220	220	220
			High	296	296	296	296	296	296
			Low	144	144	144	144	144	144
Customer contacts	Nr		Ref	3.09	3.09	3.09	3.09	3.09	3.09
			High	3.75	3.75	3.75	3.75	3.75	3.75

– discolouration (nr / 1000 population)			Low	2.43	2.43	2.43	2.43	2.43	2.43
Distribution Index TIM (as 100-Mean Zonal Compliance) (%)	%		Ref	0.23	0.23	0.23	0.23	0.23	0.23
			High	0.33	0.33	0.33	0.33	0.33	0.33
			Low	0.13	0.13	0.13	0.13	0.13	0.13

Water non-infrastructure serviceability – reference levels and control limits

Composite Index					Committed performance levels				
					2015-16	2016-17	2017-18	2018-19	2019-20
Sub measure	Unit	2014-15	Limits	AMP5	Stable	Stable	Stable	Stable	Stable
Water Treatment Works Coliforms non-compliance (%)	%		Ref	0.04	0.04	0.04	0.04	0.04	0.04
			High	0.07	0.07	0.07	0.07	0.07	0.07
			Low	0.01	0.01	0.01	0.01	0.01	0.01
Service Reservoir Coliforms non-compliance (%)*	%		Ref	0.00	0.00	0.00	0.00	0.00	0.00
			High	0.34	0.34	0.34	0.34	0.34	0.34
			Low	0.00	0.00	0.00	0.00	0.00	0.00
Turbidity (nr)	Nr		Ref	5.00	5.00	5.00	5.00	5.00	5.00
			High	11.00	11.00	11.00	11.00	11.00	11.00
			Low	0.00	0.00	0.00	0.00	0.00	0.00
Enforcem	Nr		Ref	0.00	0.00	0.00	0.00	0.00	

Composite Index				Committed performance levels					
				2015-16	2016-17	2017-18	2018-19	2019-20	
ent (incidents number)			High	1.00	1.00	1.00	1.00	1.00	1.00
			Low	0.00	0.00	0.00	0.00	0.00	0.00
Unplanned maintenance (nr)	Nr		Ref	11150	11150	11150	11150	11150	11150
			High	12416	12416	12416	12416	12416	12416
			Low	9884	9884	9884	9884	9884	9884

Performance commitment F2: Leakage

Detailed definition of performance measure: Leakage measured in megalitres/day for the calendar year. Calculation as defined for the Ofwat KPI in IN 13/03

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	MI/d	184	181	177	173	171	169
Penalty collar	MI/d		191	187	183	181	179
Penalty deadband	MI/d		186	182	178	176	174
Reward deadband	MI/d		171	167	163	161	159
Reward cap	MI/d		176	172	168	166	164

Incentive rates

Incentive type	Incentive rate (£m/MI/d)
Penalty	1.84
Reward	0.92

Additional details

Necessary detail on measurement units	The target has been calculated using the industry standard economic level of leakage methodology.
Frequency of PC measurement and any use of averaging	Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report.'
Timing and frequency of rewards/penalties	A variable penalty beginning at 5MI/d above the leakage target, calibrated at £1.84m per MI/d with a maximum of £9.2m at 10MI/d above. The penalty only applies if the target was missed

	<p>by more than 5MI/d in the immediately preceding year. The penalty is applicable in any year following a year in which the target was missed by more than 5MI/d.</p> <p>A variable reward beginning at 5MI/d below the leakage target, calibrated at £0.92m per MI/d with a maximum of £4.6m at 10MI/d below. The reward is only earned if the target was exceeded by more than 5MI/d in the immediately preceding year. The reward is applicable in any year following a year in which the target was exceeded by more than 5MI/d.</p>
Form of reward/penalty	Revenue adjustment.
Any other information or clarifications relevant to correct application of incentive	

Performance commitment F3: Asset resilience

Detailed definition of performance measure: Percentage of critical assets that are resilient against a set of criteria. Critical assets are those where failure would have a major impact on service to customers or on the environment. The definitions of resilience and criticality are set out in the supporting material to our business plan, section 12

Incentive type: Financial – penalty only

Performance commitments

	Unit	Starting level	Committed performance levels				
			2014-15	2015-16	2016-17	2017-18	2018-19
PC	%	80	80	81	83	85	87
Penalty collar	%		N/a	N/a	N/a	N/a	80
Penalty deadband	%		N/a	N/a	N/a	N/a	85

Incentive rates

Incentive type	Incentive rate (£m/%)
Penalty	3.1

Additional details

Necessary detail on measurement units	During the period 2015-20 period the company's aim is to improve its "percentage resilience score" from the current figure to 87% by 2020.
Frequency of PC measurement and any use of averaging	Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report.'
Timing and frequency of rewards/penalties	The company is not receiving any penalties until the end of the period. The maximum penalty is £15.5m.
Form of reward/penalty	Revenue adjustment.
Any other information or clarifications relevant to correct application of incentive	N/a

Wholesale wastewater outcome 1: protecting our environment

Performance commitment B2: Treating used water

Detailed definition of performance measure: The % compliance of wastewater treatment works with our discharge permits

Incentive type: Reputational

Performance commitments

	Unit	Starting level	Committed performance levels				
		2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	%	97.1	100.0	100.0	100.0	100.0	100.0

Additional details

Necessary detail on measurement units	For each of the company's wastewater treatment works there is a permit which regulates the quality of wastewater the company is allowed to discharge into rivers and coastal waters, and is regulated by the NRW. The measure is the % compliance against discharge permits.
Frequency of PC measurement and any use of averaging	Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report.'
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 B3: Preventing pollution

Detailed definition of performance measure: The total number of category 3 pollution incidents as reported by NRW within the calendar year

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	Incidents	224	161	154	131	131	131
Penalty collar	Incidents		249	249	156	156	156
Penalty deadband	Incidents		224	224	131	131	131
Reward deadband	Incidents		131	131	131	131	131
Reward cap	Incidents		106	106	106	106	106

Incentive rates

Incentive type	Incentive rate (£m/incident)
Penalty	0.400
Reward	0.047

Additional details

Necessary detail on measurement units	The total number of Welsh Water category 3 pollution incidents within the calendar year including pollution attributed to assets that transferred to the company on 1 October 2011 under the Water Industry (Schemes for Adoption of Private Sewers) Regulations 2011
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Frequency of PC measurement and any use of averaging	Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report.'
Timing and frequency of rewards/penalties	Rewards and penalties are based on annual performance with no averaging across years.
Form of reward/penalty	Revenue adjustment.
Any other information or clarifications relevant to correct application of incentive	In the event of a price control penalty applying the amount paid by way of compensation to customers and compensation of a social and environmental nature will be taken into consideration and the price control penalty will be net of these payments

Wholesale wastewater outcome 2: responding to climate change

Performance commitment C1: adapting to climate change

Detailed definition of performance measure: This measure reflects the completion of schemes to reduce the amount of surface water entering the company's systems. The measure is the volume of surface water removed from the system, expressed in number of properties equivalent. The company has defined the property equivalent volume as 100m³ per year

Incentive type: Financial – penalty only

Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	Properties	1,000	1,000	1,000	15,000	20,000	25,000
Penalty collar	Properties		1,000	1,000	1,000	1,000	1,000
Penalty deadband	Properties		1,000	1,000	8,000	10,500	13,000

Incentive rates

Incentive type	Incentive rate (£/property)
Penalty	200

Additional details

Necessary detail on measurement units	This captures reductions in the volume of rainwater draining into the company's sewerage system.
Frequency of PC measurement and any use of averaging	Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report.'

Timing and frequency of rewards/penalties	Annual.
Form of reward/penalty	Revenue adjustment.
Any other information or clarifications relevant to correct application of incentive	

Performance commitment C2: Reducing our carbon footprint

Detailed definition of performance measure: GWh of renewable energy generated

Incentive type: Reputational

Performance commitments

	Unit	Starting level	Committed performance levels				
		2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	GWh	32.89	32.89	45.22	57.55	69.89	82.22

Additional details

Necessary detail on measurement units	GWh of renewable energy generated within the year.
Frequency of PC measurement and any use of averaging	Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report.'
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

Wholesale wastewater outcome 3: Best in class customer service

Performance commitment D1: Service incentive mechanism

Detailed definition of performance measure: SIM score as defined in Ofwat's SIM guidance April 2012 and updated by IN 13/03

Incentive type: Financial – reward and penalty

Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	Industry score	Top quartile	Top quartile	Top quartile	Top quartile	Top quartile	Top quartile
Penalty collar	Industry score		Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology
Penalty deadband	Industry score		Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology
Reward deadband	Industry score		Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology
Reward cap	Industry score		Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology

Incentive rates

Incentive type	Incentive rate
Penalty	Ofwat led price control adjustments that are implemented at price reviews.
Reward	Ofwat led price control adjustments that are implemented

Incentive type	Incentive rate
	at price reviews.

Additional details

Necessary detail on measurement units	All companies report and Ofwat publish an annual industry SIM score.
Frequency of PC measurement and any use of averaging	Performance commitment measured and reported on an annual basis through the company's annual service and outcome delivery report.
Timing and frequency of rewards/penalties	Any reward or penalty will be applied at the end of the regulatory period 2015-20.
Form of reward/penalty	Adjustment to revenue.
Any other information or clarifications relevant to correct application of incentive	Performance levels are set and shown on a company wide basis.

Performance commitment D2: 'at risk' customer services

Detailed definition of performance measure: The number of customers who are on the company's register of 'at risk' at the end of the financial year. They are deemed to be 'at risk' because their service has repeatedly fallen short in one of the following areas: discolouration of water, interruptions to supply, low pressure, odour from wastewater assets, and sewer flooding

Incentive type: Reputational

Performance commitments

	Unit	Starting level	Committed performance levels				
		2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	Properties/ incidents on internal register	850	850	750	650	550	425

Additional details

Necessary detail on measurement units	<p>The measure is the number of customers on the 'At risk' register. The register records the customers who have contacted the company at least once in each of the previous three years in respect of (discolouration of water, interruptions to supply and Odour), plus customers on the DG2 register without sufficient remedial action for at least the last three years and customers who have experienced internal sewer flooding in the previous year and at least once in the preceding ten years (internal or external, hydraulic over load or other causes).</p> <p>This measure includes customer contacts and flooding attributed to assets that transferred to the company on 1 October 2011 under the Water Industry (Schemes for Adoption of Private Sewers) Regulations 2011.</p>
Frequency of PC measurement and any use of averaging	Performance commitment measured and reported on an annual basis through the company's annual service and outcome delivery report.'
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	Performance levels are set and shown on a company-wide basis.

Performance commitment D3: Properties flooded in the year

Detailed definition of performance measure: The number of properties subjected to internal sewer flooding, in line with the KPI set out in IN 13/03

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	Properties	313	310	300	292	282	269
Penalty collar	Properties		388	374	363	349	331
Penalty deadband	Properties		313	313	313	313	313
Reward deadband	Properties		271	263	256	248	238
Reward cap	Properties		232	226	221	215	207

Incentive rates

Incentive type	Incentive rate (£m/property)
Penalty	0.161
Reward	0.062

Additional details

Necessary detail on measurement units	<p>The number of properties suffering internal sewer flooding per year (not including flooding due to the most severe weather), in line with the KPI set out in IN 13/03.</p> <p>This measure includes flooding attributed to assets that transferred to the company on 1 October 2011 under the Water Industry (Schemes for Adoption of Private Sewers) Regulations 2011.</p>
--	--

Frequency of PC measurement and any use of averaging	Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report.'
Timing and frequency of rewards/penalties	Average performance over two year period in order to smooth the effects of weather variability.
Form of reward/penalty	Revenue adjustment.
Any other information or clarifications relevant to correct application of incentive	Excludes the impact of any exceptional weather conditions. In the event of a price control penalty applying the amount paid by way of compensation to customers will be taken into consideration and the price control penalty will be net of these payments.

Performance commitment D5: Earning the trust of customers

Detailed definition of performance measure: This measure is derived from the output of an annual survey of our customers. The measure is the percentage of customers who confirm they trust us

Incentive type: Reputational

Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	%	63	63	66	68	71	75

Additional details

Necessary detail on measurement units	The measure will be derived from the results of an annual survey.
Frequency of PC measurement and any use of averaging	Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report.'

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	Performance levels are set and shown on a company-wide basis.

Wholesale wastewater outcome 4: Affordable prices

Performance commitment E1: Affordable bills

Detailed definition of performance measure: The extent to which the company will continue to make bills more affordable. After 2014-15, the company proposes that customer bill increases will be 1% below the rate of inflation each year

Incentive type: Reputational

Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC		Below inflation	1% below inflation	1% below inflation	1% below inflation	1% below inflation	1% below inflation

Additional details

Necessary detail on measurement units	Maintain falling bills in real terms, beating inflation by at least 1% a year.
Frequency of PC measurement and any use of averaging	Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report.'
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	Performance levels are set and shown on a company-wide basis.

Wholesale wastewater outcome 5: Asset stewardship

Performance commitment F1: Asset serviceability

Detailed definition of performance measure: Serviceability assessment of either improving, stable, marginal or deteriorating, as defined within the Ofwat KPIs set out in IN 13/03

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	Stable
Penalty collar			Deteriorating	Deteriorating	Deteriorating	Deteriorating	Deteriorating
Penalty deadband			Marginal	Marginal	Marginal	Marginal	Marginal

Incentive rates

Incentive type	Incentive rate
Penalty	£20m maximum penalty (£2.5m per failure. See table below for more details.)

Additional details

Necessary detail on measurement units	Measurement units are based on serviceability assessment criteria as defined for the Ofwat KPIs in 'Key performance indicators – guidance, IN 13/03 and includes assets that transferred to the company on 1 October 2011 under the Water Industry (Schemes for Adoption of Private Sewers) Regulations 2011.
Frequency of PC measurement and any use of averaging	Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report.'

Timing and frequency of rewards/penalties	Penalty applied at end of period. A maximum £20m penalty will apply (£2.5m per sub-service failure) if serviceability is marginal or deteriorating in any consecutive two-year period.																					
Form of reward/penalty	Revenue adjustment.																					
Any other information or clarifications relevant to correct application of incentive	Penalty applies in the second year for which serviceability is marginal or deteriorating on one or more of the two wastewater sub-services. The table below gives two illustrative examples for how this will operate:																					
	<table border="1"> <thead> <tr> <th></th> <th>Year 1</th> <th>Year 2</th> <th>Year 3</th> <th>Year 4</th> <th>Year 5</th> <th>Penalty</th> </tr> </thead> <tbody> <tr> <td>Sewerage non-infra</td> <td>S £0.0m</td> <td>M £0.0m</td> <td>S £0.0m</td> <td>S £0.0m</td> <td>S £0.0m</td> <td>Total £0.0m</td> </tr> <tr> <td>Sewerage infra</td> <td>S £0.0m</td> <td>M £0.0m</td> <td>M £2.5m</td> <td>M £2.5m</td> <td>M £2.5m</td> <td>Total £7.5m</td> </tr> </tbody> </table>		Year 1	Year 2	Year 3	Year 4	Year 5	Penalty	Sewerage non-infra	S £0.0m	M £0.0m	S £0.0m	S £0.0m	S £0.0m	Total £0.0m	Sewerage infra	S £0.0m	M £0.0m	M £2.5m	M £2.5m	M £2.5m	Total £7.5m
		Year 1	Year 2	Year 3	Year 4	Year 5	Penalty															
Sewerage non-infra	S £0.0m	M £0.0m	S £0.0m	S £0.0m	S £0.0m	Total £0.0m																
Sewerage infra	S £0.0m	M £0.0m	M £2.5m	M £2.5m	M £2.5m	Total £7.5m																

Wastewater infrastructure serviceability – reference levels and control limits

Composite Index					Committed performance levels				
					2015-16	2016-17	2017-18	2018-19	2019-20
Sub measure	Unit	2014-15	Limits	AMP5	Stable	Stable	Stable	Stable	Stable
Sewer collapses (nr)	Nr		Ref	504	504	504	504	504	504
			High	603	603	603	603	603	603
			Low	405	405	405	405	405	405
Pollution incidents (CSO+R M+FS) (nr)	Nr	100	Ref	155	155	155	155	155	155
			High	229	229	229	229	229	229
			Low	81	81	81	81	81	81
Properties flooded due to other causes (nr)	Nr	100	Ref	120	120	120	120	120	120
			High	170	170	170	170	170	170
			Low	70	70	70	70	70	70
Properties flooded due to overloads	Nr	86	Ref	92	92	92	92	92	92
			High	132	132	132	132	132	132
			Low	52	52	52	52	52	52

Composite Index					Committed performance levels				
					2015-16	2016-17	2017-18	2018-19	2019-20
d sewers excluding severe weather (nr)									
Sewer blockages (nr)	Nr	12700	Ref	13589	13589	13589	13589	13589	13589
			High	14501	14501	14501	14501	14501	14501
			Low	13127	13127	13127	13127	13127	13127
Equipment failures (nr)	Nr		Ref	250	250	250	250	250	250
			High	311	311	311	311	311	311
			Low	190	190	190	190	190	190

Wastewater non-infrastructure serviceability – reference levels and control limits

Composite Index					Committed performance levels				
					2015-16	2016-17	2017-18	2018-19	2019-20
Sub measure	Unit	2014-15	Limits	AMP5	Stable	Stable	Stable	Stable	Stable
Sewage Treatment Works (STW) %non-compliance	%		Ref	2.44	2.44	2.44	2.44	2.44	2.44
			High	3.42	3.42	3.42	3.42	3.42	3.42
			Low	1.46	1.46	1.46	1.46	1.46	1.46
Population equivalent (PE) %non-compliance	%		Ref	0.10	0.10	0.10	0.10	0.10	0.10
			High	0.19	0.19	0.19	0.19	0.19	0.19
			Low	0.01	0.01	0.01	0.01	0.01	0.01

Composite Index					Committed performance levels				
					2015-16	2016-17	2017-18	2018-19	2019-20
Unplanned maintenance (nr)	Nr		Ref	27493	27493	27493	27493	27493	
			High	29627	29627	29627	29627	29627	
			Low	25358	25358	25358	25358	25358	
			Ref	2.44	2.44	2.44	2.44	2.44	
			High	3.42	3.42	3.42	3.42	3.42	

Performance commitment F3: Asset resilience

Detailed definition of performance measure: Percentage of critical assets that is resilient against a set of criteria. Critical assets are those where failure would have a major impact on service to customers or on the environment. The definitions of resilience and criticality are set out in the supporting material to our business plan, section 12

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	%	71	71	72	74	76	78
Penalty collar	%		N/a	N/a	N/a	N/a	71
Penalty deadband	%		N/a	N/a	N/a	N/a	76

Incentive rates

Incentive type	Incentive rate (£m/%)
Penalty	2.2

Additional details

Necessary detail on measurement units	During the period 2015-20 period our aim is to improve the “percentage resilience score” from the current figure to 78% by 2020.
Frequency of PC measurement and any use of averaging	Performance commitment measured and reported on an annual basis through the company’s ‘Annual Service and Outcome Delivery Report.’
Timing and frequency of rewards/penalties	The company is not receiving any penalties until the end of the period. The maximum penalty is £11m.
Form of reward/penalty	Revenue adjustment.

Any other information or clarifications relevant to correct application of incentive

N/a

Household retail outcome 1: Best in class customer service

Performance commitment D1: service incentive mechanism

Detailed definition of performance measure: SIM score as defined in Ofwat's SIM guidance April 2012 and updated by IN 13/03

Incentive type: Financial – reward and penalty

Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	SIM score	Top quartile	Top quartile	Top quartile	Top quartile	Top quartile	Top quartile
Penalty collar	SIM score		Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology
Penalty deadband	SIM score		Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology
Reward deadband	SIM score		Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology
Reward cap	SIM score		Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology

Incentive rates

Incentive type	Incentive rate
Penalty	Ofwat-led price control adjustments that are implemented at price reviews.
Reward	Ofwat-led price control adjustments that are implemented at

Incentive type	Incentive rate
	price reviews.

Additional details

Necessary detail on measurement units	All companies report and Ofwat publish an annual industry SIM score.
Frequency of PC measurement and any use of averaging	Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report.'
Timing and frequency of rewards/penalties	Any reward or penalty will be applied at the end of the regulatory period 2015-20.
Form of reward/penalty	Revenue adjustment.
Any other information or clarifications relevant to correct application of incentive	Performance levels are set and shown on a company-wide basis.

Performance commitment D5: Earning the trust of customers

Detailed definition of performance measure: This measure is derived from the output of an annual survey of the company's customers. The measure is the percentage of customers who confirm they trust us

Incentive type: Reputational

Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	%	63	63	66	68	71	75

Additional details

Necessary detail on measurement units	The measure will be derived from the results of an annual survey.
Frequency of PC measurement and any use of averaging	Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report.'
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	Performance levels are set and shown on a company-wide basis.

Household retail outcome 2: Affordable prices

Performance commitment E1: Affordable bills

Detailed definition of performance measure: The extent to which the company will continue to make bills more affordable. After 2014-15, the company proposes that customer bill increases will be 1% below the rate of inflation each year

Incentive type: Reputational

Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC		Below inflation	1% below inflation	1% below inflation	1% below inflation	1% below inflation	1% below inflation

Additional details

Necessary detail on measurement units	Maintain falling bills in real terms, beating inflation by at least 1% a year.
Frequency of PC measurement and any use of averaging	Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report.'
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	Performance levels are set and shown on a company-wide basis.

Performance commitment E2: Help for disadvantaged customers

Detailed definition of performance measure: The number of customers benefiting from social tariffs

Incentive type: Reputational

Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	Customers	52,000	52,000	65,000	75,000	85,000	100,000

Additional details

Necessary detail on measurement units	The number of customers using social tariffs, providing assistance to those that struggle to pay their bills.
Frequency of PC measurement and any use of averaging	Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report.'
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	Performance levels are set and shown on a company-wide basis.

Non-household retail outcome 1: Business customer satisfaction

Performance commitment D1: service incentive mechanism

Detailed definition of performance measure: SIM score as defined in Ofwat's SIM guidance April 2012 and updated by IN 13/03, applied to non-households

Incentive type: Financial – reward and penalty

Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	SIM score	Top quartile	Top quartile	Top quartile	Top quartile	Top quartile	Top quartile
Penalty collar	SIM score		Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology
Penalty deadband	SIM score		Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology
Reward deadband	SIM score		Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology
Reward cap	SIM score		Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology	Ofwat methodology

Incentive rates

Incentive type	Incentive rate
Penalty	Ofwat-led price control adjustments that are implemented at price reviews.
Reward	Ofwat-led price control adjustments that are implemented at

Incentive type	Incentive rate
	price reviews.

Additional details

Necessary detail on measurement units	All companies report and Ofwat publish an annual industry SIM score.
Frequency of PC measurement and any use of averaging	Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report.'
Timing and frequency of rewards/penalties	Any reward or penalty will be applied at the end of the regulatory period 2015-20.
Form of reward/penalty	Revenue adjustment.
Any other information or clarifications relevant to correct application of incentive	Performance levels are set and shown on a company-wide basis.

Performance commitment D4: Business customer satisfaction

Detailed definition of performance measure: Satisfaction scores, expressed as a percentage, for all non-household customers

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	%	87	87	88	89	90	90
Penalty collar	%		70	70	70	70	70
Penalty deadband	%		80	80	80	80	80

Incentive rates

Incentive type	Incentive rate (£m/%)
Penalty	0.5

Additional details

Necessary detail on measurement units	Percentage level of satisfaction across the company's non-household customer base measured as the average performance over two consecutive six month surveys.
Frequency of PC measurement and any use of averaging	Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report.'
Timing and frequency of rewards/penalties	A penalty is applicable on an annual basis if performance drops below 80%.
Form of reward/penalty	Revenue adjustment.
Any other information or clarifications	A variable penalty of £0.5m/% which applies between the penalty deadband of 80% and penalty collar of 70%. The

relevant to correct
application of incentive

maximum penalty is therefore 5 (years) x £0.5m x (80 - 70) =
£25m.

Performance commitment D5: Earning the trust of customers

Detailed definition of performance measure: This measure is derived from the output of an annual survey of the company's customers. The measure is the percentage of customers who confirm they trust us

Incentive type: Reputational

Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	%	63	63	66	68	71	75

Additional details

Necessary detail on measurement units	The measure will be derived from the results of an annual survey.
Frequency of PC measurement and any use of averaging	Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report.'
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	Performance levels are set and shown on a company-wide basis.

Non-household retail outcome 2: Affordable prices

Performance commitment E1: Affordable bills

Detailed definition of performance measure: The extent to which the company will continue to make bills more affordable. After 2014-15, the company proposes that customer bill increases will be 1% below the rate of inflation each year

Incentive type: Reputational

Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC		Below inflation	1% below inflation	1% below inflation	1% below inflation	1% below inflation	1% below inflation

Additional details

Necessary detail on measurement units	Maintain falling bills in real terms, beating inflation by at least 1% a year.
Frequency of PC measurement and any use of averaging	Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report.'
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	Performance levels are set and shown on a company-wide basis.

Outcome delivery and reporting

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

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

Table AA4.10 Dŵr Cymru’s proposals for outcome delivery and reporting

Dŵr Cymru’s proposals	Our assessment
<p>In its business plan submitted in May, Dŵr Cymru proposed that performance commitments will be measured and recorded routinely using systems and processes already in place, and will be monitored monthly, including by the Board.</p> <p>The company also plans to publish a new report called the ‘Annual service and outcome delivery report’ which will detail the company’s progress in achieving the performance commitments, the associated rewards and penalties and the impact of these on customer bills. The services of a ‘Reporter’ will be retained to provide external assurance on the quality of data, including the data contained within its new report.</p>	<p>In our methodology statement we set out our expectation that companies should demonstrate that their proposed 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>Dŵr Cymru 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>

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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