

May 2014

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



**OFWAT**

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## A1. Overview

This appendix sets out the details of the draft determination of price controls that are specific to Dŵr Cymru. On 6 May, we confirmed that Dŵr Cymru would receive an early draft determination ([‘IB 09/14 Ofwat to proceed with early draft determination for Northumbrian Water and Dŵr Cymru’](#)). Our draft determination is based on Dŵr Cymru’s revised business plan as submitted on 2 May and its responses to our subsequent queries.

Although in many areas this is a high quality business plan, we have not been able to accept Dŵr Cymru’s revised business plan in the round. Instead there are a limited number of areas where we consider it necessary to intervene to protect the interests of consumers. These are summarised in section 1.2.

It should be noted that in order for the price controls to protect the interests of consumers, we consider that – in accordance with their licence obligations - companies must act in an economic and efficient manner in all circumstances. For the avoidance of doubt, this obligation overrides any individual incentive element.

This draft determination sets out the draft allowed revenues and K factors for Dŵr Cymru, along with what they mean for average customer bills. It also sets out:

- the outcomes we expect Dŵr Cymru to deliver under each price control;
- the costs we are assuming the company will incur and, where appropriate, the assumptions we have made to arrive at the allowed revenue for each price control;
- the adjustments we are making to the wholesale water and wastewater price controls to reflect the company’s performance in 2010-15; and
- our assumptions on risk and reward, including the uncertainty mechanisms that form part of each price control.

As part of this review, we stated in [‘Setting price controls for 2015-20 – final methodology and expectations for companies’ business plans’](#) (our ‘final methodology statement’) that we would be setting separate price controls for wholesale and retail elements of the appointee business. In our methodology we explained that these separate controls would be binding, confirmed through the modifications 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. The revenue allowance for each price control is determined by the costs specific to that particular price control. This means that

companies cannot cross-subsidise between controls in terms of costs or revenues, which provides important benefits for providing more effective incentives and supports the development of the relevant markets and in particular those provided for by the Water Act 2014.

We have developed these draft determinations in accordance with our final methodology statement and our statutory duties. We have also had regard to relevant guidance from the UK Government, and where appropriate Welsh Government, and the principles of best regulatory practice to be transparent, accountable, proportionate, consistent and targeted.

Accordingly, the draft determinations are structured on an element by element basis and are separated into:

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

In each area we have set out the relevant information after our interventions – i.e. our draft determination. In those areas in which we have intervened, we discuss the difference between our view and the company view further in the specific annexes where appropriate.

For the non-household retail price control, this document does not set out a draft determination for Dŵr Cymru's default tariffs. Instead it sets out the assumptions we have made about the non-household control for the purposes of assessing the financeability of the appointed business as a whole. As discussed in, '[Draft price control determination notice: technical appendix](#)' published alongside the draft determinations for enhanced companies in April 2014, (the 'enhanced DD technical appendix'), we will set out our draft determinations for default tariffs for all companies in August, once companies have re-submitted their proposed default tariffs to us.

At the appointee level, this draft determination sets out our view of the company's financeability over the period 2015-20.

Annexes 1 to 4 provide more detail and form part of the draft price control determination.

- Annex 1 – outcomes, performance commitments and outcome delivery incentives.

- Annex 2 – wholesale costs.
- Annex 3 – household retail price control.
- Annex 4 – reconciling 2010-15 performance.

All figures are in 2012-13 average prices except where otherwise stated.

Written representations on this draft determination should be provided to us by **4 July 2014**.

## **A1.1 Bills and K factors**

The table below sets out the allowed revenues we have assumed in our draft determination for the company to deliver its statutory duties, its outcomes and its associated performance commitments. It also sets out the average customer bills on the basis of the draft determination.

This draft determination will lead to average household customer bills for water and sewerage customers of £396 by 2019-20 (excluding the impact of inflation). This is £3 lower than Dŵr Cymru's December business plan which we accepted as affordable on the basis of:

- (i) evidence of customer engagement including a customer acceptability rating of 94%,
- (ii) identification of affordability issues; and
- (iii) measures to address affordability issues for these customers.

Dŵr Cymru has adjusted its pay as you go (PAYG) ratio and regulatory capital value (RCV) depreciation from proposed in December plan. This reflects an increase in PAYG rates and reduction in RCV depreciation rates:

- (i) to increase cost recovery in 2015-20 period and;
- (ii) to switch recovery of infrastructure renewal expense (IRE) from RCV run off to PAYG.

Dŵr Cymru proposed to increase its PAYG rate from 44% to 47% to increase cost recovery in 2015-20 period and gained support for the increase in cost recovery from their customer challenge group (CCG) as necessary to ensure financial resilience which is the long term best interest of customers. Subsequently, Dŵr Cymru increased PAYG to 63% and reduced RCV run off to 2.6% to move recovery infrastructure renewal expense (IRE) to PAYG rate, this change is offsetting and

does not impact on customers' bills or level of the RCV. We have adopted Dŵr Cymru's proposed approach for the draft determination, on the basis that they engaged with proposed change in PAYG rates with their CCG and gained support for increase in cost recovery in 2015-20 period.

This draft determination – which reflects the interventions we have made to protect customers' interests – is expected to deliver savings of approximately £21 per customer, in real terms, by 2019-20 (given that the average combined bill for 2014-15 is expected to be £416).

It should be noted the average customer 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 revenue requirement across Dŵr Cymru's customer base. In practice the company will have some flexibility about the way in which it recovers the revenue requirement from different types of charges.

**Table A1 Dŵr Cymru's draft determination - K factors, allowed revenues and customer bills (in 2012-13 average prices)**

	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Wholesale water – allowed revenues (£m) <sup>1</sup>	262.4	263.1	262.0	260.7	259.6	1,307.9
Wholesale water – K (%) <sup>2</sup>	0.00%	0.26%	-0.33%	-0.66%	-0.61%	-
Wholesale wastewater – allowed revenues (£m)	351.8	352.4	351.2	349.4	348.7	1,753.5
Wholesale wastewater <sup>2</sup> – K (%)	0.00%	0.18%	-0.25%	-0.70%	-0.39%	-
Retail household allowed revenue (£m)	56	54	53	51	51	265
Retail non-household expected revenue (£m) <sup>3</sup>	9	9	9	9	9	45

	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Average customer bill – water (£)	180	180	177	175	173	-
Average customer bill – wastewater (£)	251	250	247	244	243	-
Average customer bill – combined (£) <sup>4</sup>	409	407	403	398	396	-

**Notes:**

1. The allowed revenue for our draft 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.
2. 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 reference point to express a change in K against.
3. We have not made a draft determination for the company's non-household retail control. We will do this following the resubmission of proposed default tariffs by companies to us.
4. The average combined customer bill is not equal to the sum of the average water bill and the average wastewater bill due to the use of the economies of scope factor in the household retail price control.

**A1.2 Interventions**

In many areas the plan submitted by Dŵr Cymru is high quality. However, we have intervened in relation to a limited number of areas to protect customers. These areas are summarised in the table below and are discussed in more detail throughout this document.

**Table A1.2 Interventions in Dŵr Cymru’s revised Business Plan**

Area of intervention	What we did	Why we did it
<p><b>Outcomes</b></p>	<p>We have intervened in relation to a limited number of performance commitments and ODIs. Specifically:</p> <ul style="list-style-type: none"> <li>• we reduced the maximum annual rewards available for some outcome delivery incentives (ODIs) (by around £22m in aggregate);</li> <li>• we increased the maximum annual penalties for some ODIs (by around £16.5m in aggregate);</li> <li>• we altered two performance commitments so that transferred assets were no longer excluded;</li> <li>• we excluded the proposed reputational only incentives related to: (i) maintaining the necessary credit rating; (ii) developing our people; and (iii) business efficiency.</li> </ul>	<p>In some areas the company did not follow the required methodology. Several of the rewards and penalties proposed by the company were not based on customer willingness to pay or cost of delivery, and did not take into account totex efficiency sharing</p> <p>We also intervened to include transferred assets because customers who are impacted by events such as sewer flooding will not be concerned as to whether the flood came from a pre-existing or transferred asset.</p> <p>Finally we do not consider that an incentive mechanism on credit rating is necessary; for consistency with other companies who have not proposed such an incentive, it has been excluded.</p> <p>Similarly we consider that developing our people and business efficiency are inputs not outcomes.</p>

Area of intervention	What we did	Why we did it
<b>Reconciling 2010-15 performance</b>	<p>We have intervened by slightly reducing the adjustments related to 2010-15 performance. This has the effect of reducing the revenue requirement by £2 million.</p> <p>We have also intervened and applied a shortfall RCV adjustment of £32 million.</p> <p>We did not accept the proposed adjustments to the RCV for decisions made at FD09</p>	<p>We have included a shortfall for water infrastructure serviceability as a result of the poor performance of the company on interruptions to supply over a number of years.</p>
<b>Retail</b>	<p>We made a smaller adjustment for doubtful debt driven by deprivation and bill size than the company proposed; and we did not make any adjustment for the cost of debt management (around £9 million in aggregate).</p>	<p>The company did not include any new material evidence to support the adjustment for the cost of debt management.</p>
<b>Risk and reward</b>	<p>We amended the company proposal on uncertainty mechanism for water business rate charges, so that 75% of costs would be passed through to customers.</p> <p>We have not allowed an uncertainty mechanism proposed by the company for wastewater business rate charges.</p>	<p>We consider that a 75:25% customer:company sharing rate provides the right balance between protecting the company from material risks, providing sufficient incentives for the company to minimise costs and protecting customers' interests. The 80:20% sharing rate agreed with South West Water is due to the company's WaterShare scheme.</p> <p>The company did not provide sufficient evidence that it is in customers' interests to have specific protection against wastewater business rate charges while other companies bear this risk.</p>

## A2. Wholesale water

### A2.1 Company outcomes, performance commitments and delivery incentives

#### A2.1.1 The PR14 focus on outcomes

As we set out in our final methodology statement, **outcomes** are one of the key innovations in PR14. Company business plans have been focused on outcomes rather than outputs. This ensures that companies are incentivised to deliver efficiently what customers and society need, want and are willing to pay for; and helps to legitimise their role in providing essential public services.

Companies have engaged directly with their customers and CCGs to develop a set of outcomes, together with the associated **performance commitments** and **outcome delivery incentives**. The performance commitments set out, in detail, the levels of performance that the companies commit to achieve within the five-year period from April 2015 to March 2020. The incentives set out what happens if companies over- or under-deliver against the committed performance levels.

The creation of delivery incentives directly linked to outcomes encourages strong performance on a continuous basis. The incentives give the best-performing companies the opportunity to earn improved returns from financial rewards where there is evidence customers have indicated their support. The incentives also ensure that customers are protected against poor performance. Less well-performing companies are held to account where their performance falls below their committed performance levels, and where the incentive is financial money is paid back to customers.

In order for the price controls to protect the interests of consumers, we consider that companies must act in an economic and efficient manner in all circumstances. For the avoidance of doubt, this obligation overrides any individual incentive element.

Our final methodology statement set out a framework that gives companies a choice of three incentive types (financial reward and penalty; financial penalty only; or reputational) and also considerable flexibility in how the financial incentives are calibrated. This includes the possibility of using limits on incentives (caps on rewards and collars on penalties) as well as neutral zones or deadbands within which the incentive is 'switched off'. Following our initial review of the companies' business

plans, we provided further guidance on the alignment of performance commitments with effective financial incentives in ‘[Setting price controls for 2015-20 – risk and reward guidance](#)’ (our ‘risk and reward guidance’). Further details of the approach to outcomes are set out in enhanced DD technical appendix.

### A2.1.2 Outcomes, performance commitments and incentives

The outcomes, performance commitments and outcome delivery incentives for the wholesale water control for Dŵr Cymru are summarised in table A2 below. A number of outcomes and performance commitments are relevant to all controls and so are included across water, wastewater and retail controls.

The company has proposed a relatively broad set of performance commitments (PCs) and outcome delivery incentives (ODIs) incentives which provide good coverage of its activities and have been accepted by customers. For the majority of the proposed service levels and incentives, we have adopted the company’s proposals.

For some performance commitments and incentives types, we have intervened to change the underlying performance level or incentives. These interventions are reflected in table A2 and explained in more detail in Annex 1.

**Table A2 Wholesale water outcomes, performance commitments and incentives**

Outcome	Performance commitment	Incentive type
Safe drinking water	Safety of drinking water – % of compliant samples	Financial – penalty only*,**
	Customer acceptability – contacts per 1,000 population	Financial – penalty only*,**
	Reliability of supply – minutes lost per customer per year	Reputational
Protecting our environment	Abstraction of water for use – % compliance with abstraction licences	Reputational
Responding to climate change	Carbon footprint – GWh of renewable energy generated*	Reputational

Outcome	Performance commitment	Incentive type
Excellent customer service	Service incentive mechanism (SIM)	Financial – reward and penalty
	At risk customer services – number of customers who have experienced poor service	Reputational
	Earning the trust of customers – % of customers surveyed that say they trust the company	Reputational
Affordable prices	Affordable bills – annual increase	Reputational
Asset stewardship	Asset serviceability	Financial – penalty only
	Leakage	Financial – penalty only**
	Asset resilience – % of critical assets not meeting standards	Financial – penalty only**

**Note:**

\*Denotes we have adjusted the company's revised business plan proposal for our draft determination (performance commitment or incentive type)

\*\* Denotes we have adjusted the company's revised business plan proposal for our draft determination (incentive parameters)

In assessing the proposals against the requirements of the methodology, we have identified a number of important issues. Accordingly, to protect the interests of customers we have intervened in a small number of areas associated with some of the company's proposed PCs and ODIs.

What this means in practice is that we have taken action to ensure that incentives are effective (with appropriate penalties where necessary) and that any rewards are earned only after the company delivers stretching performance and there is evidence that customers are willing to pay for outperformance. We describe the rationale for each of our actions below. Further details of the specific changes to the individual incentives are also set out in Annex 1.

### **Intervention: Penalty and reward rates insufficiently justified**

For its PCs with financial ODIs, the company has proposed incentive rates which are not based on customer willingness to pay or cost of delivery and do not take into account totex efficiency sharing. The company explained that this approach was not

based on specific calculations, but was a result of internal discussions taking into account various considerations, including, for example, the impact of other non-financial incentives and the aggregate scale of rewards and penalties. However, it stated that all decisions that had been taken in its revised proposals were in customers' interests.

We accept that being able to present round-number penalties and rewards to customers may have benefits for communication purposes. It remains, however, essential that the penalties and rewards are set at the correct level to protect customers' interests. We have reviewed the evidence provided by the company itself to check the accuracy of its statement that the proposed penalties and rewards were in customers' interests. As a result of this review, we consider that for five PCs the company has not provided sufficient justification for its departure from our final methodology statement. In this draft determination we have changed the incentive rates for these PCs in order to improve the customer protection provided by the relevant incentives.

In particular, for two water PCs (B3 – preventing pollution and D3 – properties flooded), we have applied our final methodology and calculated the reward rate using data provided by the company. This results in the maximum reward for those two incentives falling from £10 million to £1.1 million, and from £5 million to £1.9 million respectively.

For two water PCs (F2 – leakage, F3 - asset resilience) the company did not provide sufficient data to calculate the penalty rate using customers' willingness to pay. We have therefore calculated the penalty using a cost measure (incremental totex). We have also included a 25% premium to ensure customers are protected from under-delivery. If there were no premium then, taking into account the menu incentives on cost performance, companies would be financially indifferent between delivery or not. This 25% premium compares to a premium of 10% that some companies have proposed themselves.

For one PC (water A1- safety of drinking water) we have removed the company's proposed rewards and changed the ODI to a penalty only incentive. The proposed PC is driven by a compliance requirement and the company has not demonstrated support by either the Drinking Water Inspectorate (DWI) or customers for a reward for this PC. In addition, other companies have not proposed an ODI with financial rewards in this area. Taking into account these factors, we consider that the company has not justified the application of financial rewards to this PC.

We recognise that our interventions have the effect of reducing the scale of potential rewards and hence impacting on the company's RORE range. We consider that opportunities remain for the company to propose well-specified rewards around possible incentives on areas such as leakage, complaints around water discoloration, and potentially asset resilience where there is sufficient evidence that customers would value improvements in service. However, the company needs to undertake the necessary work to develop and evidence such incentives and to ensure that they are acceptable to its customers. .

### **Intervention: effectiveness of one incentive mechanism**

The company has not proposed financial incentives for some PCs. This is because it considers that it is sufficiently incentivised by the proposed 'community compensation' component of its ODI scheme or by other regulatory enforcement measures (for example, penalties for failures to meet statutory obligations, Section 18 enforcement orders, other regulatory mechanisms such as interim determinations (IDoKs), prosecutions by the DWI).

The company does not consider it is in a position to provide indicative figures on the total annual cost to the company of the 'community compensation' scheme or on other regulatory enforcement measures.

We have reviewed the company's proposals and we consider that for one water PC (A2 – customer acceptability) the company has not demonstrated that it would be sufficiently incentivised by alternative incentive mechanisms. For this PC there is a particular risk as the company has proposed a performance improvement over the period and has allocated incremental totex in order to achieve this.

For this PC we have introduced penalty only ODIs with an incentive rate based on incremental totex. In recognition of the fact that there is some impact from alternative incentive mechanisms on these PCs, we have not introduced the 25% additional premium mentioned in our proposals for the incentive on leakage.

### **Intervention: PC on credit rating not appropriate**

The company proposed a reputational only incentive related to maintaining the necessary credit rating. The PCs and ODIs do not take the place of the companies' legal obligations as water or sewerage undertaker. The company is already subject to a licence obligation to use all reasonable endeavours to maintain an investment grade credit rating. In addition, the company has provided Board Assurance of the financeability of its business plan. Therefore, we do not consider that an incentive

mechanism on credit rating is necessary and for consistency with other companies who have not provided such an incentive, it has been excluded.

### **Intervention: focus on inputs rather than outcomes for customers**

The company proposed two reputational incentives associated to the ‘developing our people’ outcome, related to the number of health and safety incidents and the staff competence for role. In addition, the company proposed a reputational incentive on operating efficiency, related to the reduction in controllable costs. In both cases, we do not consider that the proposed incentives are appropriate as their main focus is on specific company inputs rather than on delivering the outcomes that customer want. Annex 1 sets out the detail of the outcomes, performance commitments and incentives on which we are consulting as part of our draft determination.

#### **A2.1.3 Outcome delivery and reporting**

In our methodology statement we set out our expectation that companies should be able to 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 to customers.

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.

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.

We have accepted the company’s proposal. 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.

## A2.2 Calculating the wholesale water price control

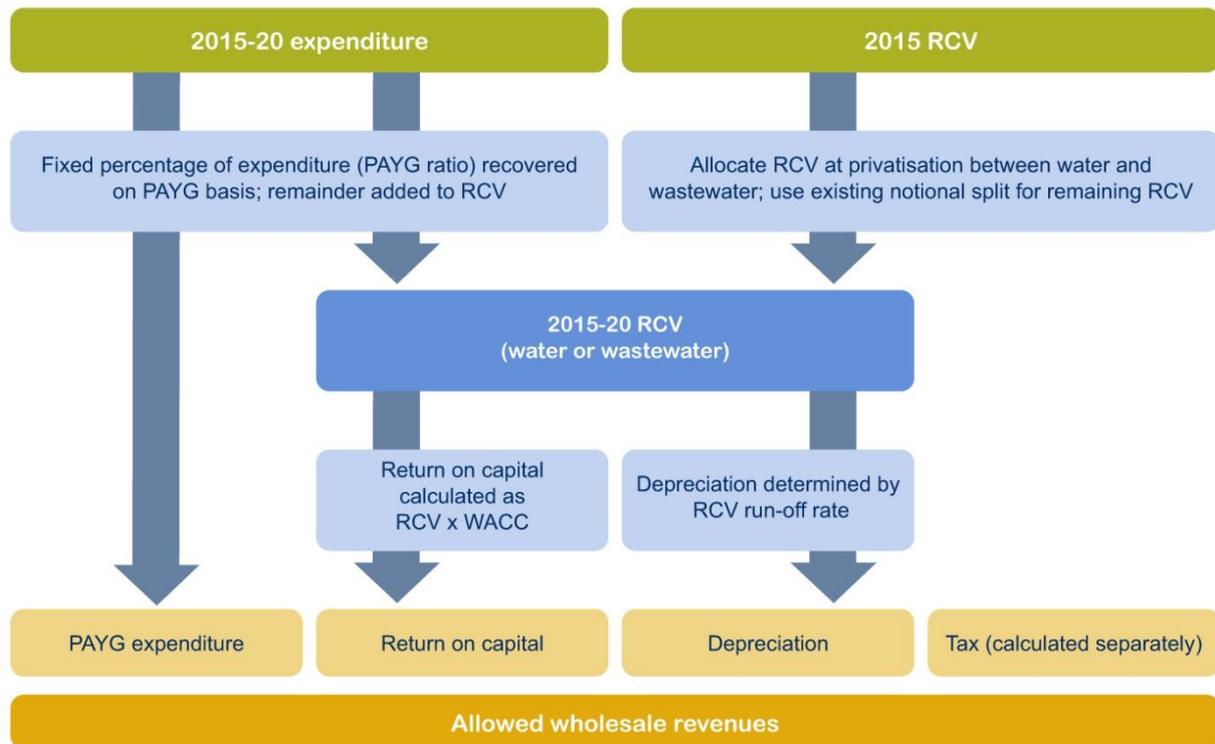
### A2.2.1 Structure of the wholesale water price control

As we set out in our final methodology statement, the wholesale water price control places an overall limit on the revenue from charges and cash receipts from connection and infrastructure charges. We also set out that we would retain an RCV approach to the setting of allowed revenue, but that we would make a number of improvements including:

- using a totex approach, where no distinction is made between operating and capital expenditure;
- introducing totex menus, which would provide an additional incentive for companies to reveal accurate information and some scope for managing risks and rewards through the cost sharing factor; and
- providing companies with additional flexibility over cost recovery by allowing them to choose what proportion of their expenditure is recovered through the RCV, and through setting the level of depreciation (also known as the RCV run-off).

Figure A1 shows how the wholesale revenues are derived.

Figure A1 Approach to allowed wholesale revenue



The key components of the allowed wholesale revenue are as follows:

- Totex baselines for water and wastewater, which represent our own assessment of the efficient level of capital and operating expenditure for each company in the 2015-20 period.
- The PAYG ratio, which represents the allocation between totex which is recovered in the 2015 to 2020 period and that which is added to the RCV.
- The RCV, which is composed of the RCV at the start of the period plus additions from totex that is not recovered in the 2015-20 period minus depreciation.
- The return on the RCV, which reflects the vanilla wholesale weighted average cost of capital (WACC) applied to the RCV during the 2015-20 period.
- There are a number of adjustments reflecting the impact of incentive tools from the 2010-15 period such as the revenue correction mechanism (RCM) and capital expenditure (capex) incentive scheme (CIS).
- The corporation tax charge, which is calculated using the forecast accounting profits
- Income from other sources relating to the activities of the regulated business ('Other operating income', 'other income' and third party income) are taken

into account to reduce the revenue required from household and non-household water customers.

Capital contributions, which form the other component of the control, are cash receipts from connection and infrastructure charges.

Subject to our charging rules (as provided for in the Water Act 2014) companies will have some flexibility to adjust charges within the control period, for example to allow them to manage unexpected changes in demand.

We are currently consulting on [potential approaches to incentivise companies to accurately forecast their revenues](#). This consultation closes on 4 June 2014.

### **A2.2.2 Calculation of allowed wholesale water expenditure**

The wholesale water price control baseline represents our view of the efficient level of expenditure.

Our approach to setting wholesale cost thresholds is summarised in Annex 2. We have developed benchmarking models to set base cost allowances and then adjusted these for items excluded from our benchmarking and certain company specific factors. Where appropriate, these include special factors that companies set out in business plans or in response to the summary information published at the end of the RBR.

In order to set the price controls, it is necessary to convert the cost thresholds into menu baselines, total allowed expenditure, and expenditure to be allowed on a PAYG basis rather than added to the RCV. Our menu baselines exclude those costs and allowances where cost sharing incentives would not be appropriate – including defined benefit pension deficit recovery costs, third party costs and 2014-15 market opening costs. We have not made an allowance for market opening costs for Dŵr Cymru given that the Welsh Government has not proposed extending retail competition to all non-household customers.

To convert the menu baseline to a totex allowance for the purpose of this draft determination, we have calculated an implied menu choice, which is the ratio of the company's view of cost and our menu baseline. We set out the menu we have used for the draft determination in Table A2 of '[Setting price controls for 2015-20 – policy and information update](#)' and this table is included in annex 2. The company's implied menu choice for wholesale water is **100.4** (see table A3 below). Dŵr Cymru will have the opportunity to finalise its menu choice within the range of 80 to 130, which will

impact on its allowed revenues and customers' bills. This will influence the company's allowed expenditure and additional income and consequently its allowed revenue and bills. The allowed revenue is based on a weighted average of our view of the baseline (75%) and the company's menu choice (25%).

The calculation of totex allowances is shown in table A3. Separate revenue allowances are made for pension deficit recovery costs and third party costs which are excluded from the menu baselines, as are 2014-15 market opening costs.

We have calculated pension deficit repair allowances in line with the approach that we outlined in '[IN 13/17: Treatment of companies' pension deficit repair costs at the 2014 price review](#)'. We have allocated costs between the different controls as set out in the IN with the exception of wholesale pension deficit costs between water and wastewater which we have allocated using the company split per Table 7 of the August 2013 data submission. This is consistent with the allowance made at the 2009 price review (PR09), with the remaining deficit repair costs borne by shareholders. We have also made some minor corrections to the application of efficiency to the pension deficit repair costs set out in the IN. We have included our updated figures in Dŵr Cymru's draft determination.

In arriving at the totex allowances in table A3, we have phased the timing of the menu baseline expenditure using the company plan totex profile. We have phased the timing of our view of the menu exclusions expenditure with our menu baseline expenditure profile.

**Table A3 Wholesale water allowed expenditure (£ million)**

	2015-16	2016-17	2017-18	2018-19	2019-20	AMP6 total
Menu cost baseline <sup>1</sup>	246.5	243.0	239.2	233.9	229.7	1,192.2
Company's view of menu costs <sup>2</sup>						1,197.6
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

	2015-16	2016-17	2017-18	2018-19	2019-20	AMP6 total
Total allowed expenditure <sup>3</sup>	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	256.4	251.4	247.6	242.3	238.1	1,235.8

**Notes:**

1. Menu baseline is equal to the draft determination threshold less pension deficit recovery costs, third party costs and market opening costs related to 2014-15 (see Annex 2).
2. Based on company plan totex minus costs for items excluded from the menu.
3. Includes pension deficit repair allowance.

In section A2 of our enhanced DD technical appendix we highlighted that **‘where the expenditure within companies’ business plans is below our cost thresholds we need to consider whether the threshold is an appropriate baseline for setting prices. This approach will help to ensure that customers’ interests are protected.’** We also noted, in respect of other, non-enhanced companies, that ‘we may need to adapt our initial cost thresholds for use in menu baselines, in particular where other companies’ business plan forecast levels of totex were significantly below the initial risk-based review cost threshold levels’.

Dŵr Cymru is relatively close to the cost thresholds for water. We do not consider the difference significant enough to warrant further intervention to protect the interests of customers and therefore have not substituted the company’s forecasts of its water explanatory variables in our calculations.

### **A2.2.3 Calculation of PAYG rates and depreciation**

To determine the allowed revenue, the wholesale water totex allowance is allocated between the amount recovered in 2015-20 PAYG (referred to as the pay as you go amount) and the amount added to the RCV to be recovered in future periods. A significant proportion of company expenditure is in long life assets, which benefit current and future customers. The allowed revenue will also include RCV depreciation and the return on the RCV as set out in figure A1 above.

Consistent with our methodology, we have allowed all companies to propose their own PAYG ratios and levels of RCV depreciation. The company has revised its proposed PAYG ratios and run-off rates from those included in its original business

plan to reflect our risk and reward guidance. The effect of this adjustment is that it has offset the lower WACC by bringing more cash forward within the next control period, and reduces the cost that future customers bear. However, we also note that Dŵr Cymru has adopted a relatively long depreciation life for its assets, choosing to recover a higher proportion of its RCV from customers in future periods.

Table A4 shows the company's updated proposed PAYG ratios and associated totex recovery for wholesale water, which we have used as the basis for this draft determination.

**Table A4 Dŵr Cymru wholesale water PAYG ratios**

	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Totex (£ m)	256.4	251.4	247.6	242.3	238.1	1235.8
PAYG %	69.1%	69.9%	69.7%	69.8%	69.8%	69.7%
Resulting PAYG (£ m)	177.3	175.7	172.4	169.2	166.2	860.8

Table A5 shows the depreciation amounts included within the wholesale water charge. The depreciation rates 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.

**Table A5 Dŵr Cymru wholesale water depreciation (£ million)**

	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Depreciation on 2015 RCV	47.7	46.0	44.5	43.0	41.5	222.7
Depreciation on totex additions	1.3	3.9	6.5	9.0	11.4	32.1
Total depreciation	49.0	50.0	51.0	52.0	53.0	254.9

#### A2.2.4 Return on the RCV

Companies receive a return on the RCV to compensate them for capital value that has not been recovered prior to and in the 2015-20 period. Our risk and reward guidance set out a single industry cost of capital for both wholesale water and wastewater services of 3.7%. The company has accepted this guidance and so we

have used a cost of capital of 3.7% in this draft determination. This results in a return on capital of £273.5 million over 2015-20.

The return on capital is calculated by applying the cost of capital to the average RCV for the year. Table A6 shows our calculation of the opening RCV at 1 April 2015. This is around £41 million lower than the company view, which is primarily driven by differences about the appropriate adjustments relating to 2010-15 performance. In particular we did not accept the company's case for increasing the 2009-10 adjustment to the RCV because the specific schemes (associated with cryptosporidium and THMs) arose due to inadequate maintenance and were not included in a formal DWI undertaking. The remaining adjustments to the RCV are explained in Annex 4 'Reconciling 2010-15 performance'.

The average RCV, set out in table A7 below for each year, takes into account totex additions to the RCV and depreciation.

**Table A6 Dŵr Cymru wholesale water opening RCV (£ million)**

	2015-16
Closing RCV 31 March 2015	1,274.4
Land sales	0.3
2009-10 performance	13.7
Capital incentive scheme	164.2
Net adjustment from logging up, logging down and shortfalls	-38.6
Other adjustments	0.0
Opening RCV 1 April 2015	1,414.0

**Table A7 Dŵr Cymru wholesale water return on RCV (£ million)**

	2015-16	2016-17	2017-18	2018-19	2019-20
Opening RCV	1,414.0	1,444.2	1,469.8	1,494.0	1,515.1
RCV additions (from totex)	79.1	75.7	75.1	73.1	71.9
Less depreciation	49.0	50.0	51.0	52.0	53.0
Closing RCV	1,444.2	1,469.8	1,494.0	1,515.1	1,534.1

	2015-16	2016-17	2017-18	2018-19	2019-20
Average RCV (year average)	1,429.1	1,457.0	1,481.9	1,504.6	1,524.6
Return on capital	52.8	53.9	54.8	55.6	56.4

### A2.2.5 Corporation tax

The allowed revenues of the wholesale water and wastewater services include the recovery of the appropriate tax, taking into account complexities such as tax losses arising at the appointee level. To help achieve this aim, wholesale tax has first been calculated at the wholesale level for both services combined, and then apportioned to the water and wastewater services for the separate allowed revenues concerned. As set out in our final methodology statement, our approach to calculating tax is similar to the method used for PR09, but with a simplified and less data-intensive approach.

We have used companies' average capital allowance writing-down rates by service for both the brought forward expenditure pools and for new expenditure. We have used Dŵr Cymru's estimates of the proportion of base expenditure on underground assets, which is treated as operating expenditure in the statutory accounts.

We have based the tax calculation on projected corporation tax rates, profits and assumed levels of tax relief. We have taken account of debt interest payments by using the higher of:

- companies' actual proportion of debt financing; and
- the proportion of debt financing assumed in our notional capital structure.

### A2.2.6 Income from other sources

Income from other sources is made up of 'operating income', 'other income' and third party income. These are revenues that companies charge but do not form part of the regular water and wastewater bills that customers pay. These revenues are based on the company's forecasts, which are consistent with recent trends, and are set out in table A9 in section A2.2.9.

### **A2.2.7 Capital contributions from connection charges and revenue from infrastructure charges**

This comprises revenue and capital contributions from connection and infrastructure charges (including requisitions and self-lay). These revenues are based on the company's forecasts and are set out in table A9 in section A2.2.9.

### **A2.2.8 Reconciling 2010-15 performance**

We confirmed in our final methodology statement that, for a number of incentive tools, we would make appropriate adjustments to allowed revenues for 2015-20, to reflect companies' actual performance, costs and revenues when compared to our PR09 assumptions. Table A8 below summarises the revenue adjustments we are making to the company's 2015-20 wholesale water price control to reflect its performance over 2010-15.

As a result of our interventions we have made overall changes to proposed 2010-15 adjustments for the water service from -£30.7 million to -£32.3 million. These interventions are as a result of:

- an increase in the scale of SIM reward as a result of our comparative analysis across the industry;
- a reduction in RCM adjustments resulting from our review (relating to the application of the number of household billed properties and other adjustments);
- an increase of CIS penalties as a result of a number of adjustments within the water programme; and
- our decision to include a shortfall of £32.3 million for water infrastructure serviceability because of the poor performance of the company on water supply interruptions (DG3) over a number of years.

Annex 4 provides more detail on our draft determination in this area.

**Table A8 Dŵr Cymru wholesale water revenue adjustments to reflect 2010-15 performance (£m)**

£ million	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Service incentive mechanism (SIM)	0.6	0.6	0.6	0.6	0.6	3.0
Revenue correction mechanism (RCM)	3.5	3.5	3.5	3.5	3.5	17.6
Opex incentive allowance (OIA)	0.0	0.0	0.0	0.0	0.0	0.0
Capital expenditure incentive scheme (CIS)	-10.6	-10.6	-10.6	-10.6	-10.6	-52.9
Other adjustments	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>-6.5</b>	<b>-6.5</b>	<b>-6.5</b>	<b>-6.5</b>	<b>-6.5</b>	<b>-32.3</b>

**Notes:**

Figures reflect Ofwat interventions

**A2.2.9 Calculation of allowed revenue**

The calculation of the allowed revenue for Dŵr Cymru's wholesale water control is shown in table A9. Allowed revenue is principally built up from PAYG totex, the return on RCV, depreciation and an allowance for corporation tax.

Overall, we consider that the company's wholesale water revenue allowance should be £262.4 million in 2015-16, decreasing by 1.1% to £259.6 million in 2019-20.

**Table A9 Dŵr Cymru wholesale water allowed revenue (£ million)**

	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Totex	256.4	251.4	247.6	242.3	238.1	1,235.8
PAYG ratio	69.14%	69.90%	69.65%	69.84%	69.79%	-
Totex additions to the RCV	79.1	75.7	75.1	73.1	71.9	374.9
RCV (year average)	1,429.1	1,457.0	1,481.9	1,504.6	1,524.6	-

	2015-16	2016-17	2017-18	2018-19	2019-20	Total
<b>Wholesale allowed revenue build up:</b>						
PAYG <sup>1</sup>	178.0	176.4	173.1	169.9	166.9	864.2
Return on capital	52.8	53.9	54.8	55.6	56.4	273.5
Depreciation	49.0	50.0	51.0	52.0	53.0	254.9
Tax <sup>2</sup>	0.0	0.0	0.0	0.0	0.0	0.0
Income from other sources	-16.1	-16.1	-16.1	-16.2	-16.2	-80.6
Reconciling 2010-15 performance	-6.5	-6.5	-6.5	-6.5	-6.5	-32.3
Ex ante additional menu income	-0.1	-0.1	-0.1	-0.1	-0.1	-0.7
<b>Capital contributions from connection charges and revenue from infrastructure charges</b>	5.3	5.6	5.8	6.0	6.3	29.0
<b>Final allowed revenues</b>	<b>262.4</b>	<b>263.1</b>	<b>262.0</b>	<b>260.7</b>	<b>259.6</b>	<b>1,307.9</b>

**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.

**A2.3 Uncertainty mechanisms**

In our risk and reward guidance, we acknowledged that all companies face uncertainty about future costs and revenues. We consider that appropriate risk sharing mechanisms provide companies with incentives to reduce costs and provide better services.

Companies already have access to a range of uncertainty mechanisms which share risks between companies and customers. In our final methodology statement, we noted that additional risk should only be fully transferred to customers when companies are unable to influence the impact on their business. As set out in our risk and reward guidance, when a company is able to materially influence the probability or magnitude of impacts, or mitigate the effect efficiently, then the risk should remain with the company, at least in part. This provides companies with strong incentives to manage risks. In our risk and reward guidance, the one area where we did consider an uncertainty mechanism was appropriate was for the revaluation of wholesale water business rates in 2017, although we considered that companies should retain a residual incentive, in order to argue for reasonable treatment in the rating review on behalf of customers.

The company has accepted this risk and reward guidance on uncertainty mechanisms. In line with our guidance, the company proposed that water business rates should be a notified item for PR14 and, as such, could qualify for an interim determination (IDoK), which allows price limits to be adjusted between periodic reviews.

The formal interim determination mechanism is set out in each company's licence. It can only be triggered by relevant items, the value of which, in aggregate, must exceed 10% of a company's turnover. The company has proposed that the uncertainty mechanism would pass through 80% of changes in water business rate costs to customers, with the company retaining 20% of the cost risk. This compares to a customer: company sharing rate of 75%:25% for Affinity and 80%:20% for South West, with South West's customers also benefiting from its Water Share mechanism. Given that Dŵr Cymru is not proposing a formal gain sharing mechanism with customers, we currently consider that a 75%:25% customer/company sharing rate is the appropriate balance between protecting the company from material risks, providing sufficient incentives for the company to minimise costs and protecting customers' interests (and once the IDoK criteria has been met).

The company withdrew its other, earlier proposals for notified items or logging up/down in its revised business plan submission.

Therefore, in this draft determination, we have not provided for other uncertainty mechanisms, beyond those set out in the company's licence, in line with our risk and reward guidance.

## A2.4 Return on regulated equity

As set out in our final methodology statement, we are taking a systematic and quantitative approach to analysing how companies are managing their risks and its allocation between companies' investors and customers. We have used an approach based on scenario modelling to analyse risk and explore the overall balance of risks to return on regulatory equity (RoRE).

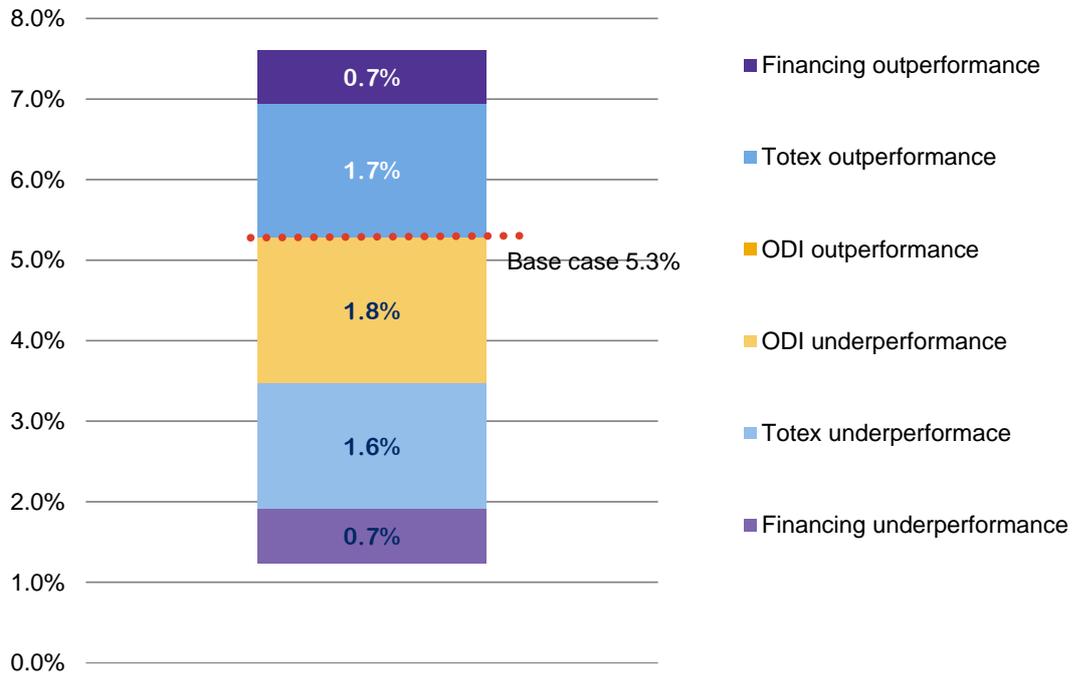
Consistent with our risk and reward guidance, as part of its revised business plan submission, Dŵr Cymru conducted detailed scenario analyses to assess the potential RoRE range at the company level. Based on Dŵr Cymru's submission, we calculated the overall RoRE range for wholesale water, shown in figure A2, split into the constituent risk components, such as totex and outcome delivery incentive under- and outperformance. The risk range is expressed on a P10/P90 basis such that there is a 10% probability of an outturn occurring below the charted range and an equal likelihood of achieving a return above the charted range.

The RoRE ranges reflect Dŵr Cymru's view of the RoRE range and take account of the impact of our interventions on ODIs.

For wholesale water, based on submissions from Dŵr Cymru, its RoRE range is from 1.2% to 7.6%, with a base case of 5.3% (the base case relates to the forecast performance level in the business plan). This is a similar range to the overall appointee range of 1.4% to 8.0%, and reflects the slightly lower expected return for wholesale as the remaining return is required to compensate risks in retail. The risk ranges for totex and financing risk are consistent with our risk and reward guidance.

The maximum reward that the company can earn under ODIs was 0.7% of RoRE in Dŵr Cymru's original resubmission, which was below the  $\pm 1\%$  to  $\pm 2\%$  range suggested in our risk and reward guidance. Following extensive engagement with the company, we have not accepted Dŵr Cymru's submissions on ODIs for water. Our interventions have the effect of removing the rewards and increasing the penalties, meaning that Dŵr Cymru's ODI range will be -1.8% to 0%. We consider that this is justified to ensure that the company cannot earn rewards unless there is clear evidence showing that this is in customers' interests.

Figure A2 Dŵr Cymru RoRE range – wholesale water



Source: Ofwat calculations based on information from Dŵr Cymru

## A3. Wholesale wastewater

### A3.1 Company outcomes, performance commitments and delivery incentives

In section A2.2.1, we discuss how, as we set out in our final methodology statement, outcomes, and the associated performance commitments and incentives, are one of the key innovations in PR14.

The outcomes, performance commitments and outcome delivery incentives we are adopting for the wholesale wastewater control are summarised in table A10 below. Similar to the water wholesale control, for some performance commitments and incentives types we have intervened to change the underlying performance level or incentives. Our interventions are explained in detail in Annex 1.

**Table A10 Wholesale wastewater outcomes, performance commitments and incentives**

Outcome	Performance commitment	Incentive type
Protecting our Environment	Treating Used Water – % compliance of WWTW's	Reputational
	Preventing pollution – number of Incidents	Financial – reward and penalty**
Responding to Climate Change	Adapting to climate change – no of properties covered by surface water removal schemes	Financial – penalty only*
	Carbon footprint – GWh of renewable energy generated*	Reputational
Excellent Customer Service	Service incentive mechanism (SIM)	Financial – reward and penalty
	At risk customer services – number of customers who have experienced poor service*	Reputational
	Sewer flooding – number of Properties*	Financial – reward and penalty**
	Earning the Trust of Customers – % of customers surveyed that say they trust the company	Reputational

Outcome	Performance commitment	Incentive type
Affordable prices	Affordable bills – annual increase	Reputational
Asset stewardship	Asset serviceability*	Financial – penalty only**
	Asset resilience – % of critical assets not meeting standards*	Financial – penalty only

**Note:**

\*Denotes we have adjusted the company's revised business plan proposal for our draft determination (performance commitment or incentive type)

\*\* Denotes we have adjusted the company's revised business plan proposal for our draft determination (incentive parameters)

Similar to our approach for wholesale water outcomes, we have intervened in a small number of areas associated with some of the company's proposed performance commitments (PCs) and outcome delivery incentives (ODIs), which we discuss below.

### **Intervention: penalty and reward rates insufficiently justified for one performance commitment**

For wastewater PC (F3 - asset resilience) the company did not provide sufficient data to calculate the penalty rate using customers' willingness to pay. We have therefore calculated the penalty using a cost measure (incremental totex). We have also included a 25% premium to ensure customers are protected from underdelivery. If there were no premium then companies would be financially indifferent between delivery or not. This 25% premium compares to a premium of 10% that some companies have proposed themselves.

### **Intervention: performance levels for transferred assets excluded**

The company has excluded transferred assets (that is, private sewers and lateral drains that have been transferred to the ownership of the regulated sewerage companies in England and Wales in 2011) from the definition of some of its PCs. The company expressed a view that it does not have sufficient historic data to include these measures and suggested it should develop additional incentives in this area in 2016.

We believe that these important assets should be covered by PCs and incentives. Customers who are impacted by sewer flooding events will not be concerned as to

whether the flood came from a pre-existing or transferred asset. Although we recognise that data on transferred assets may not yet be as robust as that for pre-existing assets, companies do have information from the period since transfer and the preparations undertaken prior to transfer. We also note that other companies have included such assets within financial incentives.

Taking into account these factors, we consider that the transferred assets should be included in the definition of relevant PCs and the company should be appropriately incentivised from the beginning of the AMP, as customers are already affected by performance issues relating to these assets.

For two wastewater PCs (B3 – preventing pollution and D3 – properties flooded in the year), the company has provided recent performance data. We have therefore included these figures in the calculation of committed performance targets for 2015-2020.

For two wastewater PCs (D2 – ‘at risk’ customer services and F1 -asset serviceability), the company proposals did not explicitly state whether transferred assets were included in the calculation of the PC. For the avoidance of doubt, we have included transferred assets in both measures.

### **Intervention: effectiveness of alternative incentive mechanisms**

For one sewerage PC (C1-adapting to climate change), the company has not demonstrated that it would be sufficiently incentivised by alternative incentive mechanisms. We consider that there is a particular risk of customer detriment as the company has proposed a performance improvement over the period and has allocated incremental totex in order to achieve this improvement.

For this PC we have introduced penalty only ODIs with an incentive rate based on incremental totex. In recognition of the impact from alternative incentive mechanisms on this PC, we have not introduced the 25% additional premium mentioned in our proposals for the incentive on leakage.

### **Intervention: PC on credit rating not appropriate**

The company proposed a reputational only incentive related to maintaining the necessary credit rating. The PCs and ODIs do not take the place of the companies’ legal obligations as water or sewerage undertaker. The company is already subject to a licence obligation to use all reasonable endeavours to maintain an investment grade credit rating. In addition, the company has provided Board Assurance of the

financeability of its business plan. Therefore, we do not consider that an incentive mechanism on credit rating is necessary and for consistency with other companies who have not provided such an incentive, it has been excluded.

### **Intervention: focus on inputs rather than outcomes for customers**

The company proposed two reputational incentives associated to the ‘developing our people’ outcome, related to the number of health and safety incidents and the staff competence for role. In addition, the company proposed a reputational incentive on operating efficiency, related to the reduction in controllable costs. In both cases, we do not consider that the proposed incentives are appropriate as their main focus is on specific company inputs rather than on delivering the outcomes that customer want.

Annex 1 sets out the detail of the outcomes, performance commitments and incentives on which we are consulting as part of our draft determination.

#### **A3.1.1 Outcome delivery and reporting**

We set out our approach to outcome delivery and reporting, and Northumbrian Water’s wholesale water proposals, in section A2.1.3. The same approach applies for wholesale wastewater.

### **A3.2 Calculating the allowed wholesale wastewater control**

#### **A3.2.1 Structure of wholesale wastewater control**

The wholesale wastewater control is structured in the same way as the wholesale water control. We have set out the structure of the wholesale water control in section A2.2.1.

#### **A3.2.2 Calculation of allowed wholesale wastewater expenditure**

The wholesale wastewater price control baseline represents our view of the efficient level of expenditure.

Our approach to setting wholesale cost thresholds is summarised in annex 2. In broad terms we have developed benchmarking models to set base cost allowances and then adjusted these for items excluded from our benchmarking and certain company specific factors. Where appropriate these include special factors that

companies set out in business plans or in response to the summary information published at the end of the RBR.

In order to set the price controls it is necessary to convert the cost thresholds in to menu baselines, total allowed expenditure and expenditure to be allowed on a PAYG basis rather than added to the RCV. Our menu baselines exclude those costs and allowances where cost sharing incentives would not be appropriate – including defined benefit pension deficit recovery costs, third party costs and 2014-15 market opening costs. We have not made an allowance for market opening costs for Dŵr Cymru given that the Welsh Government has not proposed extending retail competition to all non-household customers..

To convert the menu baseline to a totex allowance for the purpose of this draft determination, we have calculated an implied menu choice, which is the ratio of the company's view of cost and our menu baseline. We set out the menu we have used for the draft determination in Table A2 of '[Setting price controls for 2015-20 – policy and information update](#)' and this table is reproduced in Annex 2. The company's implied menu choice for wholesale wastewater is 97.1. Dŵr Cymru will have the opportunity to finalise its menu choice within the range of 80 to 130, which will impact on its allowed revenues and customers' bills. This will impact the company's allowed expenditure and additional income and consequently its allowed revenue and bills. The allowed revenue is based on a weighted average of our view of the baseline (75%) and the company's menu choice (25%).

The calculation of totex allowances is shown in table A11. Separate revenue allowances are made for pension deficit recovery costs and third party costs which are excluded from the menu baselines.

We have calculated pension deficit repair allowances in line with the approach we outlined in section A2.2.2.

In arriving at the totex allowances in table A11, we have phased the timing of the menu baseline expenditure using the company plan totex profile. We have phased the timing of our view of the menu exclusions expenditure with our profile.

**Table A11 Wholesale wastewater allowed expenditure (£m)**

	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Menu cost baseline <sup>1</sup>	282.4	279.6	274.8	267.8	263.3	1,368.0
Company's view of menu costs <sup>2</sup>						1,327.7
Implied menu choice						97.1
<b>Allowed expenditure from menu</b>	280.3	277.5	272.8	265.8	261.4	1,357.9
Costs excluded from menu	0.4	0.4	0.4	0.4	0.4	2.1
<b>Total allowed expenditure<sup>3</sup></b>	280.8	277.9	273.2	266.3	261.8	1,360.0
Less pension deficit repair allowance	0.4	0.4	0.4	0.4	0.4	2.1
<b>Totex for input to PAYG</b>	280.3	277.5	272.8	265.8	261.4	1357.9

**Notes:**

1. Menu baseline is equal to the draft determination threshold less pension deficit recovery costs, third party costs and market opening costs related to 2014-15 (see Annex 2).
2. Based on company plan totex minus costs for items excluded from the menu.
3. Includes pension deficit repair allowance.

Consistent with section A2.2.2, we have not substituted the company's forecasts of its wastewater explanatory variables into our calculations in order to derive a revised cost threshold for its draft determination. This is even though the wastewater cost threshold has increased, with Dŵr Cymru now being 3% below this threshold and Northumbrian now being 4% below this threshold because of changes to the underlying wastewater cost models (resulting from further quality assurance of the models and as summarised in our enhanced DD technical appendix). However, consistent with our approach to Affinity Water, we do not regard these differences as so significant as to require additional intervention to protect the interests of customers.

We will consider these issues further in the remaining draft determinations due to be published at the end of August. Although no company had forecast totex significantly below the risk-based review cost thresholds for wastewater, companies may move in relation to the cost thresholds as modelling and allowances for the remaining draft

determinations are finalised, and so some may be significantly below a cost threshold.

### A3.2.3 Calculation of PAYG rates and depreciation

To determine the allowed revenue, the wholesale wastewater totex allowance is allocated between the amount recovered in 2015-20 (referred to as the PAYG amount) and the amount added to the RCV to be recovered in future periods. A significant proportion of company expenditure is in long life assets, which benefit current and future customers. The allowed revenue will also include RCV depreciation and the return on the RCV, as set out in figure A1 above.

Consistent with our methodology, we have allowed all companies to propose their own PAYG ratios and levels of RCV depreciation. The company has revised its proposed PAYG ratios and run-off rates from its original business plan to reflect the risk and reward guidance we published in January 2014.

Table A12 shows the company's updated proposed PAYG ratios and associated totex recovery for wholesale wastewater, which we have used as the basis for this draft determination.

**Table A12 Dŵr Cymru wholesale wastewater PAYG ratios**

	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Totex (£m)	280.3	277.5	272.8	265.8	261.4	1,357.9
PAYG %	57.6%	57.4%	56.9%	56.7%	56.4%	-
Resulting PAYG (£m)	161.4	159.2	155.2	150.7	147.5	774.0

Table A13 shows the depreciation amounts included within the wholesale wastewater charge. The depreciation rates reflect a run-off rate of 2.26% for the RCV as it stands on 31 March 2015 and 44 years for the totex additions to the RCV over 2015-20.

**Table A13 Dŵr Cymru wholesale wastewater depreciation (£ million)**

	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Depreciation on 2015 RCV	71.5	69.9	68.3	66.8	65.3	341.8
Depreciation on totex additions	1.3	4.0	6.7	9.3	11.9	33.2
Total depreciation	72.9	73.9	75.0	76.1	77.2	375.0

**A3.2.4 Return on the RCV**

Companies receive a return on the RCV, equal to the vanilla WACC, to compensate them for capital value that has not been recovered prior to and in the PR14 period. Our risk and reward guidance set out a single industry cost of capital for both wholesale water and wastewater services of 3.7%. The company has accepted this guidance and so we have used a cost of capital of 3.7% in this draft determination. This results in a return on capital of £605 million over 2015-20.

The return on capital is calculated by applying the cost of capital to the average RCV for the year. Table A14 shows our calculation of the opening RCV at 1 April 2015. This is around £21 million lower than the company view. We did not accept the company's case for increasing the 2009-10 adjustment to the RCV. We were satisfied that the schemes (associated with investment in sludge assets connected with renewable energy generation) were cost beneficial in our review of the 2009 final determination (FD09) business plan and had included it in our FD09 assumptions. However the actual expenditure was incurred in 2009-10 and so we removed the expenditure from AMP5 and moved it into the forecast spend for 2009-10 but it was not logged up. The remaining adjustments to the RCV are explained in Annex 4 'Reconciling 2010-15 performance'.

**Table A14 Dŵr Cymru wholesale wastewater opening RCV (£m)**

	2015-16
Closing RCV 31 March 2015	3003.6
Land sales	0.7
2009-10 performance	39.6
Capital incentive scheme	70.5

	2015-16
Net adjustment from logging up, logging down and shortfalls	50.0
Other adjustments	0.0
Opening RCV 1 April 2015	3164.3

**Table A15 Dŵr Cymru wholesale wastewater return on RCV (£ million)**

	2015-16	2016-17	2017-18	2018-19	2019-20
Opening RCV	3,164.3	3,210.4	3,254.8	3,297.4	3,336.4
RCV additions (from totex)	118.9	118.3	117.6	115.1	113.9
Less depreciation	72.9	73.9	75.0	76.1	77.2
Closing RCV	3,210.4	3,254.8	3,297.4	3,336.4	3,373.2
Average RCV (year average)	3,187.4	3,232.6	3,276.1	3,316.9	3,354.8
Return on capital	117.9	119.5	121.1	122.6	124.0

### A3.2.5 Corporation tax

The allowed revenues of the wholesale water and wastewater services include the recovery of the appropriate tax, taking into account complexities such as tax losses arising at the appointee level. To help achieve this aim, wholesale tax has first been calculated at the wholesale level for both services combined, and then apportioned to the water and wastewater services for the separate allowed revenues concerned. As set out in our final methodology statement, our approach to calculating tax is similar to the method used for PR09, but with a simplified and less data-intensive approach.

We have used companies' average capital allowance writing-down rates by service for both the brought forward expenditure pools and for new expenditure. We have used the company's estimates of the proportion of base expenditure on underground assets, which is treated as operating expenditure in statutory accounts.

We have based the tax calculation on projected corporation tax rates, profits and assumed levels of tax relief. We took account of debt interest payments by using the higher of:

- companies' actual proportion of debt financing; and
- the proportion of debt financing assumed in our notional capital structure.

### **A3.2.6 Income from other sources**

Income from other sources is made up of 'operating income', 'other income' and third party income. These are revenues that companies charge but do not form part of the regular water and wastewater bills that customers pay. These revenues are based on the company's forecasts and are set out in table A17 in section A3.2.9.

### **A3.2.7 Capital contributions from connection charges and revenue from infrastructure charges**

This comprises revenue and capital contributions from connection and infrastructure charges (including requisitions and self-lay). These revenues are based on the company's forecasts and are set out in table A17 in section A3.2.9.

### **A3.2.8 Reconciling 2010-15 performance**

We confirmed in our final methodology statement that, for a number of incentive tools, we would make appropriate adjustments to allowed revenues for 2015-20, to reflect companies' actual performance, costs and revenues when compared to our PR09 assumptions. Table A16 below summarises the revenue adjustments we are making to the company's 2015-20 wholesale wastewater control to reflect its performance over 2010-15.

As a result of our interventions we have made overall changes to proposed 2010-15 adjustments for the wastewater service from -£18.3 million to -£18.9 million. These interventions are as a result of:

- an increase in the scale of SIM reward as a result of our comparative analysis across the industry;
- a reduction in RCM adjustments resulting from our review (relating to the application of the number of household billed properties and other adjustments);
- an increase of CIS penalties as a result of a number of adjustments within the wastewater programme; and
- our decision to include a number of adjustments for shortfalling and logging down relating to Welsh Government mandatory build standards.

Annex 4 provides more detail on our draft determination in this area.

**Table A16 Dŵr Cymru wholesale wastewater revenue adjustments to reflect 2010-15 performance (£ million)**

£ million	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Service incentive mechanism (SIM)	0.8	0.8	0.8	0.8	0.8	3.9
Revenue correction mechanism (RCM)	3.1	3.1	3.1	3.1	3.1	15.6
Opex incentive allowance (OIA)	0.0	0.0	0.0	0.0	0.0	0.0
Capital expenditure incentive scheme (CIS)	-7.7	-7.7	-7.7	-7.7	-7.7	-38.3
Other adjustments	0.0	0.0	0.0	0.0	0.0	0.0
Total	-3.8	-3.8	-3.8	-3.8	-3.8	-18.9

**Notes:**

1. Figures reflect Ofwat interventions

**A3.2.9 Calculation of allowed revenue**

The calculation of the allowed revenue for Dŵr Cymru's wholesale wastewater control is shown in table A17. Allowed revenue is principally built up from PAYG totex, the return on RCV, depreciation and an allowance for corporation tax.

Overall, we consider that Dŵr Cymru's wholesale wastewater revenue allowance should be £351.8 million in 2015-16, decreasing by 0.9% to £348.7 million in 2019-20.

**Table A17 Dŵr Cymru wholesale wastewater allowed revenue (£ million)**

	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Totex	280.3	277.5	272.8	265.8	261.4	1357.9
PAYG ratio	57.6%	57.4%	56.9%	56.7%	56.4%	-
Totex additions	118.9	118.3	117.6	115.1	113.9	583.9
RCV (year average)	3187.4	3232.6	3276.1	3316.9	3354.8	-

	2015-16	2016-17	2017-18	2018-19	2019-20	Total
<b>Wholesale allowed revenue build up:</b>						
PAYG <sup>1</sup>	161.8	159.6	155.6	151.2	147.9	776.1
Return on capital	117.9	119.5	121.1	122.6	124.0	605.2
Depreciation	72.9	73.9	75.0	76.1	77.2	375.0
Tax <sup>2</sup>	0.0	0.0	0.0	0.0	0.0	0.0
Income from other sources	-1.5	-1.6	-1.6	-1.7	-1.7	-8.1
Reconciling 2010-15 performance	-3.8	-3.8	-3.8	-3.8	-3.8	-18.9
Ex ante additional menu income	1.0	1.0	1.0	1.0	1.0	5.0
<b>Capital contributions from connection charges and revenue from infrastructure charges</b>	3.5	3.7	3.8	4.0	4.2	19.1
<b>Final allowed revenues</b>	<b>351.8</b>	<b>352.4</b>	<b>351.2</b>	<b>349.4</b>	<b>348.7</b>	<b>1753.5</b>

**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.

**A3.3 Uncertainty mechanisms**

In our risk and reward guidance, we acknowledged that all companies face uncertainty about future costs and revenues. We consider that good risk sharing mechanisms provide companies with incentives to reduce costs and provide better services.

Companies already have access to a range of uncertainty mechanisms which share risks between companies and customers. In our final methodology statement, we noted that additional risk should only be fully transferred to customers when companies are unable to influence the impact on their business. As set out in our risk and reward guidance, when a company is able to materially influence the probability

or magnitude of impacts, or mitigate the effect efficiently, then the risk should remain with the company, at least in part. This provides companies with strong incentives to manage risks.

The company has included an uncertainty mechanism for wastewater business rates (in addition to the water rates that we have allowed). We consider that the company has submitted insufficient evidence to show that it meets our requirements for an uncertainty mechanism as set out in the risk and reward guidance. Specifically the company has not shown:

- that the risk is sufficiently material to require an uncertainty mechanism, in particular given totex sharing;
- it has little or no control over the cost risk, and where possible, has taken appropriate steps to mitigate the risk;
- it requires specific protection from the risk given that other companies have been willing to bear this risk, in particular why there is a specific material risk to the company from a lack of transitional arrangements for business rates in Wales; and
- why an uncertainty mechanism in this area is consistent with protecting the interests of customers.

For these reasons, we do not consider that Dŵr Cymru has justified an uncertainty mechanism for wastewater business rates.

The company withdrew its earlier proposals for notified items or logging up/down. We have therefore not included any additional uncertainty mechanisms for the wastewater control.

### **A3.4 Return on regulated equity**

We describe our approach to analysing how companies are managing their risks and its allocation between companies' investors and customer in section A2.4.

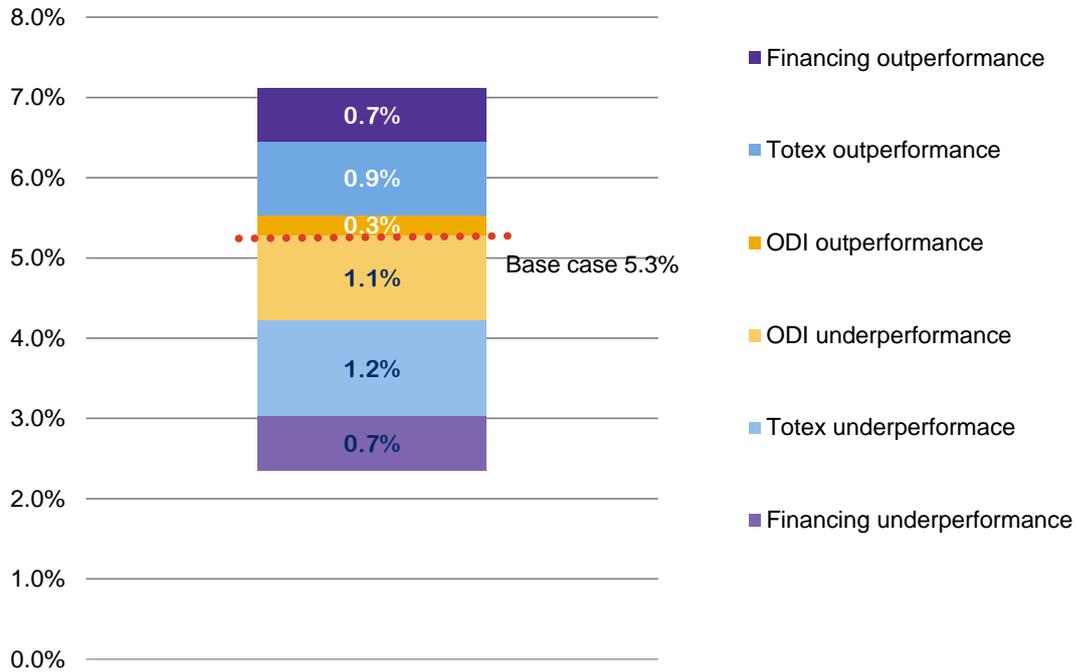
Consistent with this, and based on Dŵr Cymru's assessment for the overall company as part of its revised business plan submission, we have calculated the RoRE range for wholesale wastewater, shown in figure A3 and split into the constituent risk components such as totex and ODI under- and out-performance. The RoRE ranges reflect Dŵr Cymru's view of the RoRE range and take account of the impact of our interventions on ODIs.

For wholesale wastewater, the RoRE range is 2.4% to 7.1%, with a base case of 5.3%. This is narrower than the overall company range of 1.4% to 8.0%, with a base case of 5.7%. The base case reflects the lower expected return for the wholesale wastewater as the remaining return is required to compensate risks in retail, as well as Dŵr Cymru's analysis which shows less risk for wastewater than for water.

The maximum reward that the company could earn under ODIs was 0.9% of RoRE in Dŵr Cymru's original resubmission, which is below the  $\pm 1\%$  to  $\pm 2\%$  range suggested in our risk and reward guidance. Following extensive engagement with the company, we accepted these submissions only to a limited extent. Our interventions have the effect of reducing the rewards and increasing the penalties. As a result, Dŵr Cymru's ODI range for wholesale wastewater is now -1.1% to +0.3%. The potential upside from ODIs is outside the range in our risk and reward guidance. We consider that this is justified to ensure that the company cannot earn rewards unless there is clear evidence showing that this is in customers' interests.

The totex risk range is -1.2% to +0.9%, which again is narrower than the range for the overall company, reflecting the company's view that uncertainty is lower in wastewater than in water. The range is also narrower than the range suggested in our risk and reward guidance. We consider that this range is based on a plausible high and low case for the overall scenario, and there is enough evidence on the cost impacts. Dŵr Cymru has provided us with a complete set of assumptions underpinning its calculations and we consider that these assumptions are plausible.

Figure A3 Dŵr Cymru RoRE range – wholesale wastewater



Source: Ofwat calculations based on information from Dŵr Cymru

## A4. Household retail

### A4.1 Company outcomes, performance commitments and delivery incentives

In section A2.2.1, we discuss how, as we set out in our final methodology statement, outcomes, and the associated performance commitments and incentives, are one of the key innovations in PR14.

The outcomes, performance commitments and outcome delivery incentives we are adopting for the company's household retail control are summarised in table A18 below.

**Table A18 Household retail outcomes, performance commitments and incentives**

Outcome	Performance commitment	Incentive type
Excellent customer service	Service incentive mechanism (SIM)	Financial – reward and penalty
	Earning the trust of customers – % of customers surveyed that say they trust the company	Reputational
Affordable prices	Affordable bills – annual increase	Reputational
	Help for disadvantaged customers – no of customers benefiting from 'social tariffs'	Reputational

#### **Intervention: focus on inputs rather than outcomes for customers**

The company proposed two reputational incentives associated to the 'developing our people' outcome, related to the number of health and safety incidents and the staff competence for role. In addition, the company proposed a reputational incentive on operating efficiency, related to the reduction in controllable costs. In both cases, we do not consider that the proposed incentives are appropriate as their main focus is on specific company inputs rather than on delivering the outcomes that customer want.

We set out our broad view of the company's set of outcomes, performance commitments and outcome delivery incentives in section A2.1.2.

Annex 1 sets out the detail of the outcomes, performance commitments and incentives on which we are consulting as part of our draft determination.

The outcomes we are adopting include the service incentive mechanism (SIM) that applies to all companies.

Any SIM incentive reward or penalty due will be determined by comparing company's household SIM performance over four years (2015-16 to 2018-19) to the industry performance. The reward or penalty will range between +6% and -12% of 2019-20 household retail revenues; and we will adjust retail household revenues from 2020-21. The weights attached to the SIM performance measures will comprise 75% from qualitative survey results and 25% from quantitative measures as set out in [‘Service incentive mechanism \(SIM\) for 2015 onwards – conclusions’](#). The details of these are currently being tested by companies and we will confirm the final methodology before April 2015.

#### **A4.1.1 Outcome delivery and reporting**

We set out our approach to outcome delivery and reporting, and Dŵr Cymru's wholesale water proposals, in section A2.1.3. The same approach applies for household retail.

### **A4.2 Costs**

In our final methodology statement, we confirmed that our household retail price controls would be based on setting a revenue control for each company based on the efficient costs of retail activities (as measured by the average cost to serve, or ACTS) based on customer numbers. Setting household price controls for 2015-20 on the basis of ‘average’ costs of companies is part of an evolutionary approach that we hope will enable us to move to an efficient cost to serve over future price controls. As part of this process, we confirmed that we would adjust the ACTS to account for levels of metering. We also confirmed that companies could seek additional adjustments to the ACTS if certain criteria were met, as discussed further below.

#### **A4.2.1 Adjustments**

Our final methodology statement confirmed that companies could seek additional adjustments to their ACTS where they were able to demonstrate with sufficient and convincing evidence that:

- those costs were material to their company;
- that they were driven by factors beyond efficient management control; and
- that they impacted the company in a materially different way to other companies.

Each of these criteria is of equal importance. The first criterion ensures that adjustments to the ACTS are only made for material items. The second criterion ensures that companies needed to provide sufficient and convincing evidence that the particular factor was beyond management control and that there was a clearly evidenced causal relationship between that factor and the costs of providing retail services to household customers in their area. Similarly, companies needed to demonstrate under this criterion that their management practices in this area were efficient, or to reflect their level of inefficiency suitably in their adjustment request. The third criterion ensures that adjustments to the ACTS are only made for items that impact companies in a materially different way to other companies, given that the ACTS will generally already take account for any items that impact all companies in the same way.

Dŵr Cymru proposed two adjustments in its business plan. They were for:

- doubtful debt and debt management costs; and
- input price pressure.

We have accepted the company's evidence to support an adjustment for doubtful debt and so we have made an adjustment to the ACTS for these costs. We have not accepted the company's evidence to support an adjustment for debt management costs as part of this claim.

We have not accepted the company's evidence to support an adjustment for input price pressure.

We set out below our assessment of the company's proposed adjustments.

### **Doubtful debt and debt management costs**

In the risk-based review we assessed Dŵr Cymru's proposed adjustment for doubtful debt and concluded that the company provided insufficiently convincing evidence that the costs are outside management control and that the costs affect them in a materially different way to other companies.

In particular Dŵr Cymru did not provide sufficient and convincing evidence that doubtful debt and debt management costs were influenced by differences in deprivation in the company's area compared to other companies' areas.

We found 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.

In response to our assessment, the company's revised business plan included additional quantitative evidence to support a revised adjustment to its allowed cost to serve for doubtful debt and debt management costs driven by differences in deprivation in its area compared to other companies' areas. Specifically, the company provided an econometric model (['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) 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 £46.85 million over the period 2015-20, of which £40.83 million related to doubtful debts and £6.02 million related to debt management costs. Given that the econometric modelling did not include debt management costs, the value of the adjustment that Dŵr Cymru sought for debt management costs remained unchanged from its original business plan submission.

We assessed the new evidence in Dŵr Cymru's resubmitted business plan. This assessment included an independent review of the underlying econometric evidence for the requested adjustment, ['PwC review of Dŵr Cymru's doubtful debt cost models'](#) – figures in this report are in 2010-11 constant prices not 2012-13 prices.

PwC 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 performing 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 to support an adjustment to its allowed retail revenues.

The value of this adjustment to Dŵr Cymru's doubtful debt over the period 2015-20 is £37.82 million, compared to a figure of £46.85 million which Dŵr Cymru had

originally sought in its resubmitted business plan. The allowed adjustment excludes an adjustment for debt management costs given that the evidence that Dŵr Cymru provided to support these costs in its revised business plan was the same as the evidence provided in its original business plan. Our assessment of those costs is unchanged.

### Input price pressure

In its December plan the company sought a £29.5 million adjustment for input price pressure.

In Dŵr Cymru's May submission, the size of the adjustment had been reduced to £14.8 million across AMP6. This reflects the company's view that it can absorb inflationary pressures that occur after 2014-15, but not those cost increases that have occurred between 2012/13 and 2014-15.

However, the company provided no further supporting information to address the gaps in the evidence identified above. Consequently we have not included an adjustment for input price pressure in Dŵr Cymru's draft determination.

### Pension deficit repair costs

Pension deficit repair costs are automatically allowed for all companies, as set out in 'IN 13/17 Treatment of companies' pension deficit repair costs at the 2014 price review'. We have made some minor corrections to the application of efficiency to the pension deficit repair costs. We have therefore included our updated figures in Dŵr Cymru's draft determination.

### ACTS adjustments – position reflected in Dŵr Cymru's draft determination

The table below shows the adjustments we have included in the draft determination and the adjustments included in the company's revised business plan.

**Table A19 Household retail adjustments (£ million)**

	Units	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Doubtful debt	£m	8.360	7.942	7.545	7.168	6.809	37.824
Pension deficit repair costs	£m	0.102	0.102	0.102	0.102	0.102	0.509

	Units	2015-16	2016-17	2017-18	2018-19	2019-20	Total
<b>Adjustments included in draft determination</b>	<b>£m</b>	<b>8.462</b>	<b>8.044</b>	<b>7.647</b>	<b>7.269</b>	<b>6.911</b>	<b>38.333</b>
Doubtful debt and debt management	£m	10.355	9.837	9.345	8.878	8.434	46.850
Input price pressure	£m	2.958	2.958	2.958	2.958	2.958	14.792
Pension deficit repair costs	£m	0.185	0.185	0.185	0.000	0.000	0.555
<b>Adjustments included in BP</b>	<b>£m</b>	<b>13.498</b>	<b>12.981</b>	<b>12.489</b>	<b>11.836</b>	<b>11.393</b>	<b>62.197</b>

**Note:**

There will be no indexation for retail price controls from this 2012-13 price base.

**A4.2.2 New costs**

As set out in the enhanced DD technical appendix, our methodology allows for the possibility of a modification to be made to a company's cost to serve for new costs. However, Dŵr Cymru has forecast a falling cost profile and it has not described any notable new costs in its revised business plan. We have therefore made no modification for new costs.

**Table A20 New household retail costs**

	Units	Value
Modification made to 2013-14 CTS for ACTS calculation	£/cust	0.00

**Note:**

There will be no indexation for retail price controls from this 2012/13 price base.

**A4.2.3 Allocation of costs**

In our final methodology statement, we set out how we expect companies to allocate their costs between retail and wholesale and between household and non-household in business plans. Following the risk-based review, we considered it necessary to issue more detailed cost allocation rules for finalising price controls in PR14, to ensure a level playing field for market opening in April 2017 and to ensure that comparative regulatory tools such as the ACTS are applied fairly across companies.

On 24 March we published ‘[2014 price review cost allocation for retail and wholesale price controls](#)’ (our retail cost allocation guidance). In this document we set out how we expect companies to allocate their costs between retail and wholesale and between household and non-household for their 2 May and 27 June submissions. We stated that, where possible companies should allocate their costs directly between retail and wholesale and between household and non-household. Where this was not possible, we prescribed a consistent set of cost drivers that companies must use to allocate their costs between retail and wholesale and between household and non-household.

On 2 May we received a revised Table R3 and A19 from Dŵr Cymru along with detailed cost allocation tables and commentary setting out the changes that it has made to its cost allocation to comply with the 24 March guidance. The company has also provided external assurance from PwC confirming that it has complied with our retail cost allocation guidance.

We have reviewed the company’s cost allocation and are satisfied that, with one exception, it is in accordance with our retail cost allocation guidance. The exception is the allocation of doubtful debts between household and non-household. Our retail cost allocation guidance states that doubtful debts should be directly attributed between household and non-household on a customer-specific basis; the company has allocated this cost between household and non-household based on debt outstanding greater than one year.

We have accepted the company’s cost allocations between retail and wholesale and between household and non-household for the draft determination. The company will submit its 2013-14 actuals on 27 June which will be used for the final determination. We have made it clear to Dŵr Cymru that for its 27 June submission we expect to see doubtful debt allocated between household and non-household in accordance with our retail cost allocation guidance.

### **A4.3 Calculating the allowed revenues**

We set out our approach to calculating the average cost to serve in the enhanced DD technical appendix. Using the average industry allowances per customer, and the projected customer numbers in the company’s revised business plan (see Annex 3), we have calculated the total allowed household retail revenues in 2012-13 prices, including the efficiency challenge and the household retail net margin.

### A4.3.1 Net margins

In our risk and reward guidance, we confirmed that our view of an appropriate net margin was 1% for household retail price controls. The table below shows the household retail net margin over 2015-20.

The retail net margin applies to total household costs and is therefore applied to wholesale charges to supply households, plus allowed household retail costs.

**Table A21 Household retail net margins**

	Units	2015-16	2016-17	2017-18	2018-19	2019-20
Household retail net margin	%	1.00%	1.00%	1.00%	1.00%	1.00%

The table below sets out the components of the allowed household retail revenue.

**Table A22 Components of the allowed household retail revenue**

	Units	2013-14	2015-16	2016-17	2017-18	2018-19	2019-20
Company cost to serve unmeasured single service customers	£/cust	25.82					
Company cost to serve unmeasured water and wastewater customers	£/cust	33.57					
Company cost to serve measured water-only customers	£/cust	29.99					
Company cost to serve measured wastewater-only customers	£/cust	30.01					
Company cost to	£/cust	37.75					

	Units	2013-14	2015-16	2016-17	2017-18	2018-19	2019-20
serve measured water and wastewater customers							
Allowed cost to serve unmeasured single service customers <sup>1</sup>	£/cust		28.13	26.97	25.76	24.60	24.38
Allowed cost to serve unmeasured water and wastewater customers <sup>1</sup>	£/cust		36.57	35.06	33.49	31.98	31.70
Allowed cost to serve measured water-only customers <sup>1</sup>	£/cust		31.65	30.19	28.92	27.73	27.49
Allowed cost to serve measured wastewater-only customers <sup>1</sup>	£/cust		31.66	30.20	28.92	27.73	27.50
Allowed cost to serve measured water and wastewater customers <sup>1</sup>	£/cust		40.10	38.29	36.65	35.11	34.81
Total allowed cost to serve (excluding net margin)	£m		50.2	48.4	46.6	44.8	44.8
Total household wholesale charge (including forecast RPI)	£m		509.4	529.0	545.9	561.7	578.7
Total household retail revenue (including net margin)	£m		56	54	53	51	51

**Notes:**

There will be no indexation for retail price controls from this price base.

1. Allowed cost to serve includes pension deficit repair costs.
2. The household wholesale charge is displayed here including forecast RPI so that the total household retail revenue can be displayed on the same price base as other retail costs, that is, there will be no subsequent indexation of this total household retail revenue

As we set out in our final methodology statement, we will make a modification to allowed revenues to account for the difference between actual and forecast customer numbers. The details of how this difference is calculated and the modification factors for calculating the value of this modification are set out in annex 3.

## **A4.4 Uncertainty mechanisms**

In our risk and reward guidance, we acknowledged that all companies face uncertainty about future costs and revenues. We consider that good risk sharing mechanisms provide companies with incentives to reduce costs and provide better services.

Companies already have access to a range of uncertainty mechanisms which share risks between companies and customers. In our final methodology statement, we noted that additional risk should only be fully transferred to customers when companies are unable to influence the impact on their business. As set out in our risk and reward guidance, when a company is able to materially influence the probability or magnitude of impacts, or mitigate the effect efficiently, then the risk should remain with the company, at least in part. This provides companies with strong incentives to manage risks.

The company did not propose any specific uncertainty mechanisms for household retail and has accepted the risk and reward guidance.

## **A4.5 Return on regulated equity**

Consistent with the approach set out in our risk and reward guidance, the risk analysis conducted by Dŵr Cymru as part of its revised business plan submission to understand the potential range of returns on equity has been expressed as a margin range for retail elements. The RORE range below reflects the figures from Dŵr Cymru's revised business plan rather than the range for the draft determination.

Dŵr Cymru has adopted a 1% retail household margin in their base case plan, for which we calculate a low case of -1.7% and a high case of +2.6% (that is, -2.7% to +1.6%). The downside risk reflects a situation, as submitted by the company, which combines a large retail cost overspend (equivalent to 2.0% of invoiced revenue) and an adverse outcome from SIM (equivalent to 0.7% of invoiced revenue).

The high case is predominantly related to the possibility of a favourable outcome from SIM accompanied by a retail cost underspend. Dŵr Cymru considers that it is exposed to substantial retail cost risk, as it views its retail efficiency target to be challenging. We consider this risk range to be plausible and in line with our guidance on risk and reward.

Dŵr Cymru did not submit any financial ODIs for their household retail business (apart from SIM). Given that the national SIM and guaranteed service standards (GSS) service quality mechanisms incentivise performance in household retail services, we consider that this is acceptable.

## A5. Non-household retail

### A5.1 Default tariffs

As described in the enhanced DD technical appendix, we have included financial assumptions for an indicative price control for non-household retail to support our appointee-level financeability assessment. This is based on the total non-household retail costs as presented in the company's own revised business plan table A19, and the net margin of 1.0% relevant for the company as set out in our risk and reward guidance.

The retail net margin applies to total non-household costs and is therefore applied to wholesale charges to supply non-households, plus allowed non-household retail costs.

For the 29 August default tariff determinations, for companies operating wholly or mainly in Wales, we will apply a 1.0% margin to all default tariffs covering customers that use less than 50 Ml of water a year, and 2.5% for those that use more. All things being equal, this will result in a slight increase in the aggregate net margin that we set compared to the blanket 1.0% assumption used here.

The table below gives the indicative revenues from default tariffs that we have included in this draft determination for financeability assessment purposes. The table assumes an aggregate flat net margin profile for the overall non-household retail business.

Note that companies are free to propose different net margin profiles for specific default tariffs within the overall business if they consider this to be appropriate, but the non-household margins in aggregate should not be greater than the amounts proposed in our risk and reward guidance, as discussed in [‘Setting price controls for 2015-20 – guidance for companies on producing default tariffs’](#).

For companies operating wholly or mainly in Wales, as well as setting a default tariff we will set an up-front non-household efficiency challenge based on comparisons with equivalent tariffs available to customers in England. As all companies will be resubmitting their default tariffs on 27 June, we have not been able to apply an efficiency challenge at this time. We will undertake an assessment based on the 27 June resubmission, and publish draft determinations for default tariffs on 29 August.

**Table A23 Indicative non-household retail total revenue price control including net margins**

	Units	2015-16	2016-17	2017-18	2018-19	2019-20
Indicative non-household retail total revenue price control including net margins	£m	9	9	9	9	9

**Note:**

There will be no indexation for retail price controls from this price base.

## A5.2 Company outcomes, performance commitments, and delivery incentives

In section A2.2.1, we discuss how, as we set out in our final methodology statement, outcomes, and the associated performance commitments and incentives, are one of the key innovations in PR14.

The outcomes, performance commitments and outcome delivery incentives we are adopting for the company's non-household retail control are summarised in table A24 below. This includes the non-household SIM that applies to companies operating wholly or mainly in Wales. The non-household SIM will incentivise delivery of services to non-households served by companies wholly or mainly in Wales. 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.

**Table A24 Non-household retail outcomes, performance commitments and incentives**

Outcome	Performance commitment	Incentive type
Excellent customer service	Service incentive mechanism (SIM)	Financial – reward and penalty
	Non-household customer satisfaction – % satisfied customers	Financial – penalty only**
	Earning the trust of customers – % of customers surveyed that say they trust the company	Reputational
Affordable prices	Affordable bills – annual increase	Reputational

**Note:**

\*Denotes we have adjusted the company's revised business plan proposal for our draft determination (performance commitment or incentive type)

\*\* Denotes we have adjusted the company's revised business plan proposal for our draft determination (incentive parameters)

**Intervention: focus on inputs rather than outcomes for customers**

The company proposed two reputational incentives associated to the 'developing our people' outcome, related to the number of health and safety incidents and the staff competence for role. In addition, the company proposed a reputational incentive on operating efficiency, related to the reduction in controllable costs. In both cases, we do not consider that the proposed incentives are appropriate as their main focus is on specific company inputs rather than on delivering the outcomes that customer want.

We set out our broad view of the company's set of outcomes, performance commitments and outcome delivery incentives in section A2.1.2.

Annex 1 sets out the detail of the outcomes, performance commitments and incentives on which we are consulting as part of our draft determination.

The outcomes we are adopting include the non-household SIM (Wales) that applies to companies operating wholly or mainly in Wales. As set out in '[Service incentive mechanism \(SIM\) for 2015 onwards – conclusions](#)', this new measure is being tested by the companies during 2014-15.

### **A5.2.1 Outcome delivery and reporting**

We set out our approach to outcome delivery and reporting, and Dŵr Cymru's wholesale water proposals, in section A2.1.3. The same approach applies for non-household retail.

### **A5.3 Return on regulated equity**

Consistent with the approach set out in our risk and reward guidance, the risk analysis conducted by Dŵr Cymru as part of its revised business plan submission, to understand the potential range of returns on equity, has been expressed as a margin range for retail elements.

Dŵr Cymru has adopted a 1% retail non-household margin in its base-case plan for non-contestable markets, and a 2.5% retail non-household margin for contestable markets, that is, customers larger than 50 Ml/year and customers in England. Dŵr Cymru expect to earn an average non-household margin of 1.1%, for which we have calculated a low case of -2.9% and a high case of +1.7% (that is, -4.0% to +0.6%). The downside risk reflects a situation, as submitted by the company, which combines a significant retail cost overspend (equivalent to 0.8% of invoiced revenue), an ODI penalty of 3% of non-household retail invoiced revenue and an adverse outcome from SIM (equivalent to 0.3% of invoiced revenue).

The high case is predominantly related to the possibility of a favourable outcome from SIM accompanied by a retail cost underspend. We consider the range to be plausible and in line with our guidance on risk and reward.

Dŵr Cymru submitted a financial ODI for its non-household retail business, incentivising business customer satisfaction. We consider that this ODI is sufficiently distinct from the SIM to be acceptable.

## A6. Appointee financeability

As we set out in our final methodology statement, one of our statutory duties is to ensure that an efficient company is able to finance its functions, in particular by securing reasonable returns on its capital.

Consistent with our wider approach to PR14, we require water companies to demonstrate that their business plans are financeable. As we said in our final methodology statement, our preferred approach is that companies assure themselves of their financeability through:

- an assessment of financeability (and financial ratios) at a whole company level – using aggregated revenues, costs and cash flows associated with regulated activities across all the price controls we set;
- an assessment of financeability on the basis of the appointee having a notional capital structure and associated costs of finance (we set out our view of appropriate cost of finance in our risk and reward guidance);
- companies demonstrating that projected financial ratios are at levels which allow them efficiently to finance their functions; and
- an assessment of whether the activities covered by the retail price controls are financeable in their own right.

As set out in our final methodology statement, we have asked companies to demonstrate they can finance their activities by providing financial ratios in their business plans. The financial ratios are those typically reviewed by credit rating agencies for testing credit risk and the risk of default on debt. Further ratios, which are more relevant to equity investors, are also considered.

Under our methodology we consider financeability before adjustments that reflect performance over 2010-15 as this approach preserves incentives on companies and ensures that the focus is on the underlying financeability of the business.

We have compared the financial ratios provided by Dŵr Cymru and our calculation of its financial ratios (before interventions), when both are prepared on a notional basis. These are illustrated in the table below (with the financial ratios from the draft determination considered later in this section).

We have estimated similar notional ratios as the company when adjusting for differing assumptions under a notional structure. 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%). Our dividend profile is consistent with our allowed cost of equity. The higher gearing used in our calculations will tend to reduce Dŵr Cymru's financial ratios. Our assumption of lower index-linked debt will reduce cash-based financial ratios. The two sets of financial ratios are set out in table A25 below.

**Table A25 Company and Ofwat financial ratio calculations based on the company business plan**

Financial ratios for notional company	Company calculation (average 2015-20)	Ofwat calculation (average 2015-20)
Cash interest cover	2.74	2.50
Adjusted cash interest cover ratio (ACICR) – base case (avg over five years)	1.76	1.57
Funds from operations/debt	7.87%	7.01%
Retained cashflow/debt	6.83%	4.44%
Gearing	60.49%	62.26%
Dividend cover (profit after tax/dividends paid)	0.91	0.21
Regulatory equity/regulated earnings for the regulated company	32.84	124.48
RCV/EBITDA	13.57	13.95

Dŵr Cymru has stated that it places a high degree of importance on its credit rating, as the company is limited by guarantee. Dŵr Cymru currently holds a rating of A3/A- and this is the target rating for the company over the 2015-20 period. It also targets an investment grade rating for the notional company. Dŵr Cymru engaged with its credit rating agencies on the financeability of its revised plan prior to its submission to Ofwat. While the focus of this engagement was around Dŵr Cymru rather than the notional company, Dŵr Cymru is similar to the notional company, so this analysis has some relevance for the assessment of the notional company. As noted below, Dŵr Cymru has subsequently followed up this discussion with engagement on the financeability of the notional company.

Dŵr Cymru has lower gearing and higher proportion of index linked debt compared to the notional company but this is offset by a higher cost of debt. Dŵr Cymru considers its revised business plan is financeable on both an actual and notional basis.

Our calculations generally show lower financial ratios, largely on account of the higher gearing and lower index-linked debt assumptions.

There are more significant differences in the dividend cover ratio between the Dŵr Cymru and the Ofwat calculation. These relate to:

- (i) differences in calculation of operating profit as Dŵr Cymru include specific adjustments to the calculation of accounting profit which are not included in Ofwat's notional calculation; and
- (ii) Dŵr Cymru has a lower assumed dividend payment.

Both the credit and equity ratios reflect that Dŵr Cymru has taken less cash in the AMP6 period from the combination of PAYG and RCV run off than the accounting calculation of expenditure in period. Consequently Dŵr Cymru has strong RCV growth (around 7% over 2015 to 2020 period).

We note there are some differences between some of the financial ratios for Dŵr Cymru compared with typical credit rating thresholds. The adjusted interest cover ratio is consistent with stronger investment grade ratios while the funds from operations (FFO)/debt ratio and interest cover ratio are weaker. The ratios are broadly stable over the 2015-20 period.

We have placed onus on company to demonstrate financeability in PR14 and our interventions in the Dŵr Cymru plan have had relatively modest impact on the allowed revenue, with some additional allowed totex as a consequence of Dŵr Cymru's relative wholesale water and wastewater efficiency and the disallowance of some proposed retail and legacy costs. Due to the modest size of these adjustments, we consider that it is appropriate to continue to place weight on the Dŵr Cymru's board assurance of the financeability of the business plan.

Given the level of the FFO/Debt ratio we have sought additional assurance from Dŵr Cymru that it considers that its plan is financeable. Dŵr Cymru has had additional discussions with Standard and Poor's (S&P). In addition, Dŵr Cymru provided further evidence to support its view that it expects to achieve an investment grade credit rating under a notional structure with the business plan projections. In particular Dŵr Cymru states that it has an A grade credit rating with S&P based on its actual

structure, with an implied underlying credit rating of BBB+ (excluding the impact of its underlying credit structure). It further states that the reported FFO/Debt ratios for the actual structure in 2011/12 and 2012/13 and gearing are similar to the those for the notional structure and that the S&P credit rating is not expected to change with the business plan projections. Based on these additional assurances we consider that the draft determinations are financeable based on a notional financial structure. We also note the company has scope to use menu choices to increase the level of revenue in period.

The table below sets out the financeability ratios based on our draft determination revenues and costs.

**Table A26 Financeability ratios based on our draft determination**

Financial ratios for notional company	Ofwat calculation (average 2015-20)
Cash interest cover	2.49
Adjusted cash interest cover ratio (ACICR) – base case (avg over five years)	1.57
Funds from operations/debt	7.00%
Retained cashflow/debt	4.43%
Gearing	62.30%
Dividend cover (profit after tax/dividends paid)	0.19
Regulatory equity/regulated earnings for the regulated company	127.40
RCV/EBITDA	13.95

## Annex 1 Outcomes, performance commitments and outcome delivery incentives

This chapter sets out in detail the performance commitments and outcome delivery incentives we are proposing for the company's wholesale water, wholesale wastewater and household retail and non-household retail outcomes.

The chapter is organised with the wholesale water outcomes and associated performance commitments and delivery incentives presented first, followed by the wastewater outcomes and then the household and non-household retail outcomes. It provides the following information on each performance commitment.

- The name and detailed definition of the performance commitment.
- The type of incentive.
- The performance commitment level.
- The limits on rewards and penalties (caps and collars) and neutral zones (deadbands) as applicable<sup>1</sup>.
- The incentive rates, if applicable.
- Additional details on the measure.
- 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 which illustrate how the different incentive types will operate.

Where we have intervened in relation to the above, we have intentionally set out our interventions using a ~~strike through~~. What this means is that we have rejected the proposal that has been struck through and instead we have either using a different value or not included a value at all (for example in the case of some rewards).

Dŵr Cymru will be able to finalise its proposed menu choice and ODI calibrations following our consideration of responses to these proposals.

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<sup>1</sup> In general the cap or collar is the level of service at which the maximum penalty or reward occurs and a deadband is the level of service at which the incentive first applies. However, where a greater than or less than symbol precedes the figure this denotes that the maximum or initial incentive only occurs if service is greater than or less than this level

## Wholesale water outcome: safe drinking water

### Performance commitment: safety of drinking water

#### Detailed definition of performance measure

The proportion of tests within samples taken at the company's water treatment works (WTWs), service reservoirs (SRVs) or customers' taps that have passed in the year, that is, the % of sample tests that are compliant with all required standards.

#### Incentive type

Financial – reward and penalty only.

#### Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Performance commitments	%	99.977	99.977	99.980	99.983	99.987	99.990
Penalty collar	%		99.920	99.923	99.926	99.930	99.933
Penalty deadband	%		99.960	99.963	99.966	99.970	99.973
Reward deadband	%		99.989	99.990	99.992	99.993	99.995
Reward cap	%		100	100	100	100	100

## Incentive rates

Incentive type	Performance levels (%)		Incentive rate
	Lower	Upper	
Penalty 1	99.920	99.973	£0-£10m penalty payable pro-rata to performance within the band £250m/percent
Penalty 2			
Reward	99.989	100	£0-£10m reward payable pro-rata to performance within the band

## Additional details

Necessary detail on measurement units	The DWI Chief Inspector's Annual Report publishes a list of the total number of tests taken at the company's WTWs, SRVs or at customers taps and identifies how many test failures have occurred. This gives the % compliance on test samples.
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	Adjustment to revenue
Any other information or clarifications relevant to correct application of incentive	<p>Failure of this measure would have a large reputational impact and the possibility of a fine imposed by the DWI.</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>

## Explanation of intervention made

Intervention made	Rationale for change	Evidence used
Removed reward	The company has not provided sufficient evidence for the proposed reward. The DWI does not support rewards for water quality compliance.	The company's PC and ODI supporting documents (SD2 and SD7).
The penalty calculation (£10m penalty pro rate to performance) has been replaced by a rate (£250m/percent)	The penalty proposed by the company did not comply with the July methodology.	The new penalty rate has been calculated so as to provide the same maximum penalty in 2019-20.

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## Performance commitment: 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

~~Reputational~~ Financial – penalty only

## Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Performance commitments	Contacts per 1,000 population	3.2	3.2	3.2	3.1	3	2.9
Penalty collar	Contacts per 1,000 population		3.2	3.2	3.2	3.2	3.2

## Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Reputational Penalty 1	n/a 3.2	n/a 2.9	n/a £9.3m/contact/1,000 population

## 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 the company's 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	Adjustment to revenue
Any other information or clarifications relevant to correct application of incentive	n/a

### Explanation of intervention made

Intervention made	Rationale for change	Evidence used
A penalty incentive has been applied.	The company has not demonstrated that its proposals would provide effective incentives	The penalty rate has been based on Incremental totex from table W1. The penalty collar has been set at the level of performance estimated for 2014-15. No deadband has been set. A 25% penalty has not been imposed in recognition that there are other incentives that impact on this PC.

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## Performance commitment: reliability of supply

### Detailed definition of performance measure

Average minutes of supply interruption per property within the company's supply area (includes both planned and unplanned interruptions) as defined for the Ofwat KPI in [IN 13/03: Regulatory reporting for 2012-13 – process](#).

### Incentive type

Reputational.

### Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Performance commitments	Min	48	48	47	46	44	43

### Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Reputational	n/a	n/a	n/a

### Additional details

Necessary detail on measurement units	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.
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'.

<p><b>Timing and frequency of rewards/penalties</b></p>	<p>n/a</p>
<p><b>Form of reward/penalty</b></p>	<p>n/a</p>
<p><b>Any other information or clarifications relevant to correct application of incentive</b></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: protecting our environment

### Performance commitment: abstraction for water for use

#### Detailed definition of performance measure

Percentage compliance with the company's abstraction licences, as regulated by Natural Resources Wales (NRW).

#### Incentive type

Reputational.

#### Performance commitments

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

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

#### Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Reputational	n/a	n/a	n/a

### Additional details

Necessary detail on measurement units	The company will report on the % of the company's abstraction licences that they are 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	n/a

## Wholesale water outcome: responding to climate change

### Performance commitment: 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
Performance commitments	GWh	40	40	55	70	85	100
		7.11	7.11	9.78	12.45	15.11	17.78

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Performance commitments	GWh	40	40	55	70	85	100

#### Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Reputational	n/a	n/a	n/a

## 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	Increasing the company's renewable energy production capacity by focusing on such initiatives as hydro generation, solar photo-voltaic and expanding the company's anaerobic digestion capacity. This is part of the company's commitment to reduce the company's carbon footprint.

## Explanation of intervention made

Intervention made	Rationale for change	Evidence used
The performance commitment has been corrected.	The company's original data was for the whole company and not for the water element. The data did not correspond to that in table W1.	The company's resubmitted figures in table W1

## Wholesale water outcome: best in class customer service

### Performance commitment: service incentive mechanism (SIM)

#### 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
Performance commitments	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	Performance levels		Incentive rate
	Lower	Upper	
Penalty 1	Ofwat methodology	Ofwat methodology	Ofwat-led price control adjustments that are implemented at price reviews
Penalty 2			
Reward	Ofwat methodology	Ofwat methodology	Ofwat-led price control adjustments that are implemented at price reviews

## Additional details

Necessary detail on measurement units	All companies report and Ofwat publishes the industry SIM scores annually
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: ‘at risk’ customer services

### Detailed definition of performance measure

This is 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 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
Performance commitments	No of properties/ incidents on internal register	850	850	750	650	550	425

### Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Reputational	n/a	n/a	n/a

## 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: 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 the company.

### Incentive type

Reputational.

## Performance commitments

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

## Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Reputational	n/a	n/a	n/a

## 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: affordable prices

### Performance commitment: affordable bills

#### Detailed definition of performance measure

The extent to which the company continues 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
Performance commitments	n/a	Below inflation	1% below inflation	1% below inflation	1% below inflation	1% below inflation	1% below inflation

#### Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Reputational	n/a	n/a	n/a

#### 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: asset stewardship

### Performance commitment: asset serviceability

#### Detailed definition of performance measure

Serviceability assessment of either stable/marginal/deteriorating as defined within the Ofwat key performance indicator, 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
Performance commitments		Stable	Stable	Stable	Stable	Stable	Stable
Penalty collar			Deteriorating	Deteriorating	Deteriorating	Deteriorating	Deteriorating
Penalty deadband			Marginal	Marginal	Marginal	Marginal	Marginal

#### Incentive rates

Incentive type	Performance levels (%)		Incentive rate (£/%/year)
	Lower	Upper	
Penalty	Deteriorating	Marginal	A £20m maximum penalty (£2.5m per failure per year).

## 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 per year), if serviceability is marginal or deteriorating in any consecutive two-year period.																					
Form of reward/penalty	Adjustment to revenue																					
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:																					
	<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>W. non-infra</td> <td>S</td> <td>M</td> <td>S</td> <td>M</td> <td>S</td> <td>N/A</td> </tr> <tr> <td>W. infra</td> <td>S</td> <td>M</td> <td>M £2.5m</td> <td>M £2.5m</td> <td>M £2.5m</td> <td>£7.5m</td> </tr> </tbody> </table>		Year 1	Year 2	Year 3	Year 4	Year 5	Penalty	W. non-infra	S	M	S	M	S	N/A	W. infra	S	M	M £2.5m	M £2.5m	M £2.5m	£7.5m
		Year 1	Year 2	Year 3	Year 4	Year 5	Penalty															
W. non-infra	S	M	S	M	S	N/A																
W. infra	S	M	M £2.5m	M £2.5m	M £2.5m	£7.5m																

## 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 – penalty only.

## Performance commitments

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

## Incentive rates

Incentive type	Performance levels (MI/d)		Incentive rate
	Lower	Upper	
Penalty	174	191	A £0m to £5m maximum penalty pro rata to performance between the deadband and the collar. £1.84m/MI/d

## 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/day above the leakage target calibrated at <del>£4m</del> £1.84m per MI/d with a maximum of <del>£5m</del> £9.2m at 10MI/d. Only applies if the target was missed by more than 5MI/d in the immediately preceding year. Penalty is applicable in any year following a year in which the target was missed by more than 5 MI/d.
Form of reward/penalty	Adjustment to revenue

Any other information or clarifications relevant to correct application of incentive	
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/day above the leakage target calibrated at £1m per MI/d with a maximum of £5m at 10MI/d. Only applies if the target was missed by more than 5MI/d in the immediately preceding year. Penalty is applicable in any year following a year in which the target was missed by more than 5 MI/d.
Form of reward/penalty	Adjustment to revenue
Any other information or clarifications relevant to correct application of incentive	

### Explanation of intervention made

Intervention made	Rationale for change	Evidence used
The proposed penalty calculation (£5m penalty pro rate to performance) has been replaced by a rate (£1.84m/MI/d)	<p>The penalty proposed by the company was not justified and did not meet our methodology requirements.</p> <p>The company's proposed penalty is less than the potential cost savings gained from not spending the incremental totex, providing insufficient incentive to meet the PC targets. The 25% premium is imposed so that customers are protected from under-delivery.</p>	The revised penalty has been calculated using the company's data on incremental totex from table S1 and includes a 25% premium to ensure customers are protected from under-delivery.

## Performance commitment: 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 the company's 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
Performance commitments	%	80	80	81	83	85	87
Penalty collar	%		n/a	n/a	n/a	n/a	85
Penalty deadband	%		n/a	n/a	n/a	n/a	85

### Incentive rates

Incentive type	Performance levels (%)		Incentive rate
	Lower	Upper	
Penalty	85	85	<del>£2.5 million</del> £15.5m if < 85%

### Additional details

Necessary detail on measurement units	During the period 2015-20 period the company's aim is to improve the "percentage resilience score" from the current figure to 87% by 2020.
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<b>Frequency of PC measurement and any use of averaging</b>	Performance commitment measured and reported on an annual basis through the company's 'Annual service and outcome delivery report'.
<b>Timing and frequency of rewards/penalties</b>	The company is not proposing any penalties until the end of the period. Maximum of <del>£2.5 million</del> £15.5m penalty over 5 year period
<b>Form of reward/penalty</b>	Adjustment to revenue
<b>Any other information or clarifications relevant to correct application of incentive</b>	

### Explanation of intervention made

<b>Intervention made</b>	<b>Rationale for change</b>	<b>Evidence used</b>
The penalty has been increased from £2.5 million to £15.5 million over 5 year period	<p>The penalty proposed by the company was not justified and did not meet the July methodology requirements.</p> <p>The company's proposed penalty is less than the potential cost savings gained from not spending the incremental totex, providing insufficient incentive to meet PC targets. The 25% premium is imposed so that customers are protected from under-delivery</p>	The revised penalty has been calculated using the company's data on incremental Totex from Table W1 and includes a 25% premium to ensure customers are protected from under-delivery.

## Wholesale water outcome: developing our people

### Performance commitment: health and safety

#### Detailed definition of performance measure

~~Number of reported injuries under RIDDOR. PC has been removed~~

#### Incentive type

~~Reputational. PC has been removed~~

#### Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Performance commitments	<del>Number</del>	<del>12</del>	<del>12</del>	<del>11</del>	<del>11</del>	<del>10</del>	<del>10</del>

#### Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Reputational	<del>n/a</del>	<del>n/a</del>	<del>n/a</del>

#### Additional details

Necessary detail on measurement units	<del>The annual reportable injuries within RIDDOR</del>
Frequency of PC measurement and any use of averaging	<del>Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report'</del>
Timing and frequency of rewards/penalties	<del>n/a</del>

Form of reward/penalty	n/a
Any other information or clarifications relevant to correct application of incentive	n/a

### Explanation of intervention made

Intervention made	Rationale for change	Evidence used
The PC has been removed	The proposed incentives focus on specific company inputs rather than on delivering the outcomes that customer want.	N/A

### Performance commitment: competence for role

#### Detailed definition of performance measure

~~Staff are evaluated annually through performance management reviews against an internal competency framework, assessing skills and knowledge applicable to their role. This measure is the percentage of staff who are assessed as fully competent at the end of the year. PC has been removed~~

#### Incentive type

~~Reputational. PC has been removed~~

#### Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Performance commitments	%	86	86	88	94	93	95

## Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Reputational	n/a	n/a	n/a

## Additional details

Necessary detail on measurement units	% of staff who are fully competent in their role.
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.

## Explanation of intervention made

Intervention made	Rationale for change	Evidence used
The PC has been removed	The proposed incentives focus on specific company inputs rather than on delivering the outcomes that customer want.	N/A

## Wholesale water outcome: business efficiency

### Performance commitment: operating efficiency

#### Detailed definition of performance measure

~~Cumulative % reduction in controllable costs. PC has been removed~~

#### Incentive type

~~Reputational. PC has been removed~~

#### Performance commitments

		Starting level			Committed performance levels		
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Performance commitments	Cumulative – % of controllable costs	6	9	11	12	14	16

#### Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Reputational	n/a	n/a	n/a

#### Additional details

Necessary detail on measurement units	<del>Percentage reduction in controllable operating costs.</del>
Frequency of PC measurement and any use of averaging	<del>Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report'</del>

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

### Explanation of intervention made

Intervention made	Rationale for change	Evidence used
The PC has been removed	The proposed incentives focus on specific company inputs rather than on delivering the outcomes that customer want.	N/A

### Performance commitment: financing efficiency

#### Detailed definition of performance measure

~~Credit rating, as assessed by the major ratings agencies.~~ PC has been removed.

#### Incentive type

~~Reputational.~~ PC has been removed.

#### Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Performance commitments	Credit Rating	A/A3/A	A/A3/A	A/A3/A	A/A3/A	A/A3/A	A/A3/A

## Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Reputational	n/a	n/a	n/a

## Additional details

Necessary detail on measurement units	To maintain the A/A3/A rating by S & P, Moody's and Fitch respectively.
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.

## Explanation of intervention made

Intervention made	Rationale for change	Evidence used
The PC has been removed	We do not consider that an incentive mechanism on credit rating is necessary; for consistency with other companies who have not proposed such an incentive, it has been excluded.	N/A

## Wholesale wastewater outcome: protecting our environment

### Performance commitment: treating used water

#### Detailed definition of performance measure

The % compliance of wastewater treatment works with the discharge permits.

#### Incentive type

Reputational.

#### Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Performance commitments	%	97.1	97.5	97.5	98	98.5	99

#### Incentive rates

Incentive type	Performance levels		Incentive rate (£/days/year)
	Lower	Upper	
Reputational	n/a	n/a	n/a

#### 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.
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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	n/a
Form of reward/penalty	n/a
Any other information or clarifications relevant to correct application of incentive	n/a

## Performance commitment: preventing pollutions

### Detailed definition of performance measure

The total number of category 1, 2 and 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
Performance commitments	Number	209	150	143	136	129	122
		224	161	154	146	139	131
Penalty collar	Number		210	200	190	181	171
			221	211	200	191	180
Penalty deadband	Number		180	172	163	155	146
			191	183	173	165	155
Reward deadband	Number		120	114	119	103	98

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
			131	125	129	113	107
Reward cap	Number		99	86	82	77	73
			101	97	92	87	82

### Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Penalty 1	210 221	146 155	<del>A £10million penalty pro rate to performance.</del> £400k/incident
Penalty 2			
Reward	120 131	73 82	<del>A £10million reward pro rate to performance.</del> £47k/incident

### Additional details

Necessary detail on measurement units	The total number of Welsh Water category 1, 2 or 3 pollution incidents within the calendar year including pollution attributed to assets that transferred to the company on 1/10/2011 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	Average performance over three-year period (reflecting the significant impact of weather variability on this measure).
Form of reward/penalty	Adjustment to revenue

<b>Any other information or clarifications relevant to correct application of incentive</b>	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.
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Intervention made	Rationale for change	Evidence used
The penalty calculation (£10m penalty pro rate to performance) has been replaced by a rate (£400k/incident)	The penalty proposed by the company did not comply with the July methodology.	The new penalty rate has been calculated so as to provide the same maximum penalty in 2019-20.
The proposed reward calculation (£10m reward pro rate to performance) has been replaced by a rate (£47k/incident)	The reward proposed by the company was not justified by the company and did not meet the July methodology requirements.	The new reward rate has been calculated using data provided by the company in table S2.
The performance commitment and the deadbands, caps and collars have been increased to take into account assets that transferred to the company on 01/10/14. The description of the measure has been changed to specifically include pollutions from these assets	The company had not included pollutions attributable to the transferred assets in their PC and had not included a specific PC for transferred assets.	The revised performance levels were calculated using the data provided by the company in its document “Response to Queries – 19 <sup>th</sup> May 2014”  A rate of improvement was applied based on the company’s rate of improvement for other assets.

## Wholesale wastewater outcome: responding to climate change

### Performance commitment: 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 100m<sup>3</sup> per year.

#### Incentive type

Reputational. Penalty only.

#### Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Performance commitments	Equivalent properties	1000	1000	10000	15000	20000	25000
Penalty collar	Equivalent properties		1000	10000	1000	1000	1000

#### Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Reputational	n/a	n/a	n/a
Penalty	1000	25000	£200/property

## 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	n/a Annual
Form of reward/penalty	n/a Adjustment to Revenue
Any other information or clarifications relevant to correct application of incentive	n/a

## Explanation of intervention made

Intervention made	Rationale for change	Evidence used
A penalty incentive has been applied.	The company has not demonstrated that its proposals are of sufficient scale to provide effective incentives	The penalty rate has been based on Incremental totex from table S1. The penalty cap has been set at the level of performance estimated for 2014/15. No deadband has been set. A 25% penalty has not been imposed in recognition that there are other incentives that impact on this PC.

## Performance commitment: 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
Performance commitments	GWh	40	40	55	70	85	100
		32.89	32.89	45.22	57.55	69.89	82.22
		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Performance commitments	GWh	40	40	55	70	85	100

### Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Reputational	n/a	n/a	n/a

## 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	Increasing the company's renewable energy production capacity by focusing on such initiatives as hydro generation, solar photo-voltaic and expanding the company's anaerobic digestion capacity. This is part of the company's commitment to reduce the company's carbon footprint.

## Explanation of intervention made

Intervention made	Rationale for change	Evidence used
The performance commitment has been corrected.	The company's original data was for the whole company and not for the wastewater element. The data did not correspond to that in table S1.	The company's resubmitted figures in Table S1

## Wholesale wastewater outcome: best in class customer service

### Performance commitment: service incentive mechanism (SIM)

#### 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
Performance commitments	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	Performance levels		Incentive rate
	Lower	Upper	
Penalty 1	Ofwat methodology	Ofwat methodology	Ofwat-led price control adjustments that are implemented at price reviews
Penalty 2			
Reward	Ofwat methodology	Ofwat methodology	Ofwat-led price control adjustments that are implemented 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: ‘at risk’ customer services

### Detailed definition of performance measure

This is 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 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
Performance commitments	No of properties/incidents on internal register	850	850	750	650	550	425

## Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Reputational	n/a	n/a	n/a

## 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 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).</p> <p>This measure includes customer contacts and flooding attributed to assets that transferred to the company on 1/10/2011 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.

## Explanation of intervention made

Intervention made	Rationale for change	Evidence used
The description of the measure has	The company had not included pollutions attributable to the	

Intervention made	Rationale for change	Evidence used
been changed to specifically include contacts and flooding from transferred assets	transferred assets in its PC and had not included a specific PC for transferred assets.	

## Performance commitment: 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
Performance commitments	No of properties	496	496	486	478	468	455
		313	313	297	284	268	248
Penalty collar	No of properties		274	260	249	235	217
			391	371	355	335	310
Penalty deadband	No of properties		235	223	214	202	186
			352	334	320	302	279
Reward deadband	No of properties		157	149	142	134	124
			274	260	248	234	217
Reward cap	No of properties		418	412	407	404	93
			235	223	213	201	186

## Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Penalty 1	274 391	486 302	£10m penalty payable pro-rata 161£k/property
Penalty 2			
Reward	274	201	£10m reward payable pro-rata 62£k/property

## 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 1/10/2011 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	Adjustment to revenue
Any other information or clarifications relevant to correct application of incentive	<p>Excludes the impact of any exceptional weather conditions.</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>
Necessary detail on measurement units	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.

<b>Frequency of PC measurement and any use of averaging</b>	Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report'
<b>Timing and frequency of rewards/penalties</b>	Average performance over two year period in order to smooth the effects of weather variability.
<b>Form of reward/penalty</b>	Adjustment to revenue
<b>Any other information or clarifications relevant to correct application of incentive</b>	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.

### Explanation of intervention made

<b>Intervention made</b>	<b>Rationale for change</b>	<b>Evidence used</b>
The penalty calculation (£10m penalty pro rate to performance) has been replaced by a rate (£161k/property)	The penalty proposed by the company did not comply with the July methodology.	The new penalty rate has been calculated so as to provide the same maximum penalty in 2019-20
The proposed reward calculation (£10m reward pro rate to performance) has been replaced by a rate (£62k/property)	The reward proposed by the company was not justified by the company and did not comply with the July methodology.	The new reward rate has been calculated using data provided by the company in table S2.
The performance commitment and the deadbands, caps and collars have been increased to take into account assets that transferred to the company on 01/10/14. The description of the	The company had not included pollutions attributable to the transferred assets in their PC and had not included a specific PC for transferred assets.	The revised performance levels were calculated using the data provided by the company in their document "Response to Queries – 19 <sup>th</sup> May 2014"  A rate of improvement was applied based on the company's rate of improvement for other assets.

Intervention made	Rationale for change	Evidence used
measure has been changed to specifically include flooding from these assets		

## Performance commitment: 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
Performance commitments	%	63	63	66	68	71	75

### Incentive rates

Incentive type	Performance levels		Incentive rate (£/days/year)
	Lower	Upper	
Reputational	n/a	n/a	n/a

### Additional details

Necessary detail on measurement units	The measure will be derived from the results of an annual survey.
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<b>Frequency of PC measurement and any use of averaging</b>	Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report'
<b>Timing and frequency of rewards/penalties</b>	n/a
<b>Form of reward/penalty</b>	n/a
<b>Any other information or clarifications relevant to correct application of incentive</b>	Performance levels are set and shown on a company wide basis.

## Wholesale wastewater outcome: affordable prices

### Performance commitment: affordable bills

#### Detailed definition of performance measure

The extent to which the company continues 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
Performance commitments	n/a	Below inflation	1% below inflation	1% below inflation	1% below inflation	1% below inflation	1% below inflation

#### Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Reputational	n/a	n/a	n/a

#### 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: asset stewardship

### Performance commitment: asset serviceability

#### Detailed definition of performance measure

Serviceability assessment of either stable/marginal/deteriorating as defined within the Ofwat key performance indicator, 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
Performance commitments	Serviceability	Stable	Stable	Stable	Stable	Stable	Stable
Penalty collar	Serviceability		Deteriorating	Deteriorating	Deteriorating	Deteriorating	Deteriorating
Penalty deadband	Serviceability		Marginal	Marginal	Marginal	Marginal	Marginal

#### Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Penalty	Deteriorating	Marginal	A £20m maximum penalty (£2.5m per sub-service failure).

## 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 1/10/2011 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	Adjustment to revenue.																					
Any other information or clarifications relevant to correct application of incentive	<p>Penalty applies in the second year for which serviceability is marginal or deteriorating on one or more of the two waste water sub-services. The table below gives two illustrative examples for how this will operate.</p> <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>S. non-infra</td> <td>S</td> <td>M</td> <td>S</td> <td>S</td> <td>S</td> <td>N/A</td> </tr> <tr> <td>S. infra</td> <td>S</td> <td>M</td> <td>M £2.5m</td> <td>M £2.5m</td> <td>M £2.5m</td> <td>£7.5m</td> </tr> </tbody> </table>		Year 1	Year 2	Year 3	Year 4	Year 5	Penalty	S. non-infra	S	M	S	S	S	N/A	S. infra	S	M	M £2.5m	M £2.5m	M £2.5m	£7.5m
	Year 1	Year 2	Year 3	Year 4	Year 5	Penalty																
S. non-infra	S	M	S	S	S	N/A																
S. infra	S	M	M £2.5m	M £2.5m	M £2.5m	£7.5m																
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																					
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	Adjustment to revenue.																					

**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 waste 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
S. non-infra	S	M	S	S	S	N/A
S. infra	S	M	M £2.5m	M £2.5m	M £2.5m	£7.5m

**Explanation of intervention made**

Intervention made	Rationale for change	Evidence used
The description of the measure has been changed to specifically include transferred assets	The company did not include pollutions attributable to the transferred assets in its PC nor a specific PC for transferred assets.	

**Performance commitment: 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 the company’s 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
Performance commitments	%	71	71	72	74	76	78
Penalty collar	%		n/a	n/a	n/a	n/a	76
Penalty deadband	%		n/a	n/a	n/a	n/a	76

## Incentive rates

Incentive type	Performance levels (%)		Incentive rate
	Lower	Upper	
Penalty	76	76	<del>£2.5 million if &lt; 76%.</del> £11 million if < 76%

## Additional details

Necessary detail on measurement units	During the period 2015-20 period the company's 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 proposing any penalties until the end of the period. Maximum of <del>£2.5</del> 11 million penalty
Form of reward/penalty	Adjustment to revenue
Any other information or clarifications relevant to correct application of incentive	

## Explanation of intervention made

Intervention made	Rationale for change	Evidence used
<p>The penalty has been increased from £2.5 million to £11 million</p>	<p>The penalty proposed by the company was not justified by the company and did not comply with the July methodology.</p> <p>The company's proposed penalty is less than the potential cost savings gained from not spending the incremental totex, giving the company an insufficient incentive to meet its PC targets. The 25% premium is imposed so that customers are protected from under-delivery</p>	<p>The revised penalty has been calculated using the company's data on incremental totex from Table S1 and includes a 25% premium to ensure customers are protected from under-delivery.</p>

## Wholesale wastewater outcome: developing our people

### Performance commitment: health and safety

#### Detailed definition of performance measure

~~Number of reported injuries under RIDDOR. PC has been removed~~

#### Incentive type

~~Reputational. PC has been removed~~

#### Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Performance commitments	Number	13	13	12	11	11	10

#### Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Reputational	n/a	n/a	n/a

#### Additional details

Necessary detail on measurement units	<del>The annual reportable injuries within RIDDOR</del>
Frequency of PC measurement and any use of averaging	<del>Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report'</del>
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.

### Explanation of intervention made

Intervention made	Rationale for change	Evidence used
The PC has been removed	The proposed incentives focus on specific company inputs rather than on delivering the outcomes that customer want.	N/A

### Performance commitment: competence for role

#### Detailed definition of performance measure

~~Staff are evaluated annually through performance management reviews against an internal competency framework, assessing skills and knowledge applicable to their role. This measure is the percentage of staff who are assessed as fully competent at the end of 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
Performance commitments	%	86	86	88	94	93	95

## Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Reputational	n/a	n/a	n/a

## Additional details

Necessary detail on measurement units	% of staff who are fully competent in their role.
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.

## Explanation of intervention made

Intervention made	Rationale for change	Evidence used
The PC has been removed	The proposed incentives focus on specific company inputs rather than on delivering the outcomes that customer want.	N/A

## Wholesale wastewater outcome: business efficiency

### Performance commitment: operating efficiency

#### Detailed definition of performance measure

~~Cumulative % reduction in controllable costs.~~ PC has been removed

#### Incentive type

~~Reputational.~~ PC has been removed

#### Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Performance commitments	Cumulative – % of controllable costs	7	13	15	17	21	6

#### Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Reputational	n/a	n/a	n/a

#### Additional details

Necessary detail on measurement units	<del>Percentage reduction in controllable operating costs.</del>
Frequency of PC measurement and any use of averaging	<del>Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report'</del>

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

### Explanation of intervention made

Intervention made	Rationale for change	Evidence used
The PC has been removed	The proposed incentives focus on specific company inputs rather than on delivering the outcomes that customer want.	N/A

## Performance commitment: financing efficiency

### Detailed definition of performance measure

~~Credit rating, as assessed by the major ratings agencies. PC has been removed.~~

### Incentive type

~~Reputational. PC has been removed.~~

### Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Performance commitments	Credit Rating	A/A3/A	A/A3/A	A/A3/A	A/A3/A	A/A3/A	A/A3/A

### Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Reputational	n/a	n/a	n/a

### Additional details

Necessary detail on measurement units	<del>To maintain the A/A3/A rating by S &amp; P, Moody's and Fitch respectively.</del>
Frequency of PC measurement and any use of averaging	<del>Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report'</del>
Timing and frequency of rewards/penalties	n/a
Form of reward/penalty	n/a
Any other information or clarifications	<del>Performance levels are set and shown on a company wide</del>

relevant to correct application of incentive

basis.

### Explanation of intervention made

Intervention made	Rationale for change	Evidence used
The PC has been removed	We do not consider that an incentive mechanism on credit rating is necessary; for consistency with other companies who have not proposed such an incentive, it has been excluded.	N/A

## Household retail outcome: best in class customer service

### Performance commitment: 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
Performance commitments	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	Performance levels		Incentive rate
	Lower	Upper	
Penalty 1	Ofwat methodology	Ofwat methodology	Ofwat-led price control adjustments that are implemented at price reviews
Penalty 2			
Reward	Ofwat methodology	Ofwat methodology	Ofwat-led price control adjustments that are implemented 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: 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 the company.

### Incentive type

Reputational.

### Performance commitments

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

### Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Reputational	n/a	n/a	n/a

### 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: affordable prices

### Performance commitment: affordable bills

#### Detailed definition of performance measure

The extent to which the company continues 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
Performance commitments	n/a	Below inflation	1% below inflation	1% below inflation	1% below inflation	1% below inflation	1% below inflation

#### Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Reputational	n/a	n/a	n/a

#### 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: 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
Performance commitments	Number of customers eligible	52,000	52,000	65,000	75,000	85,000	100,000

### Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Reputational	n/a	n/a	n/a

### 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.

## Household retail outcome: developing our people

### Performance commitment: health and safety

#### Detailed definition of performance measure

~~Number of reported injuries under RIDDOR. PC has been removed~~

#### Incentive type

~~Reputational. PC has been removed~~

#### Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Performance commitments	Reportable injuries within RIDDOR	4	4	4	4	4	0

#### Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Reputational	n/a	n/a	n/a

#### Additional details

Necessary detail on measurement units	<del>The annual reportable injuries within RIDDOR</del>
Frequency of PC measurement and any use of averaging	<del>Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report'</del>

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	<del>Performance levels are set on a Retail (household &amp; non household) wide basis.</del>

### Explanation of intervention made

Intervention made	Rationale for change	Evidence used
The PC has been removed	The proposed incentives focus on specific company inputs rather than on delivering the outcomes that customer want.	N/A

## Performance commitment: competence for role

### Detailed definition of performance measure

~~Staff are evaluated annually through performance management reviews against an internal competency framework, assessing skills and knowledge applicable to their role. This measure is the percentage of staff who are assessed as fully competent at the end of the year. PC has been removed~~

### Incentive type

Reputational. PC has been removed

### Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Performance commitments	%	86	86	88	94	93	95

### Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Reputational	n/a	n/a	n/a

### Additional details

Necessary detail on measurement units	<del>% of staff who are fully competent in their role.</del>
Frequency of PC measurement and any use of averaging	<del>Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report'</del>
Timing and frequency of rewards/penalties	n/a

<b>Form of reward/penalty</b>	n/a
<b>Any other information or clarifications relevant to correct application of incentive</b>	<del>Performance levels are set and shown on a company-wide basis.</del>

### Explanation of intervention made

<b>Intervention made</b>	<b>Rationale for change</b>	<b>Evidence used</b>
The PC has been removed	The proposed incentives focus on specific company inputs rather than on delivering the outcomes that customer want.	N/A

## Household retail outcome: business efficiency

### Performance commitment: operating efficiency

#### Detailed definition of performance measure

~~A cumulative % reduction of controllable costs. PC has been removed~~

#### Incentive type

~~Reputational. PC has been removed.~~

#### Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Performance commitments	Cumulative – % of controllable costs	0	4	8	12	16	16

#### Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Reputational	n/a	n/a	n/a

#### Additional details

Necessary detail on measurement units	<del>To minimise the cost of service delivery through a combination of innovation and the adoption of best practice.</del>
Frequency of PC measurement and any use of averaging	<del>Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report'</del>

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	<del>Performance levels are set on a retail (household &amp; non household) wide basis.</del>

### Explanation of intervention made

Intervention made	Rationale for change	Evidence used
The PC has been removed	The proposed incentives focus on specific company inputs rather than on delivering the outcomes that customer want.	N/A

## Non-household retail outcome: best in class customer service

### Performance commitment: 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
Performance commitments	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	Performance levels		Incentive rate
	Lower	Upper	
Penalty 1	Ofwat methodology	Ofwat methodology	Ofwat-led price control adjustments that are implemented at price reviews
Penalty 2			
Reward	Ofwat methodology	Ofwat methodology	Ofwat-led price control adjustments that are implemented 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: business customer satisfaction

### Detailed definition of performance measure

Satisfaction scores 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
Performance commitments	% B. customers satisfied	87	87	88	89	90	90
Penalty collar			70	70	70	70	70
Penalty deadband			80	80	80	80	80

### Incentive rates

Incentive type	Performance levels (%)		Incentive rate
	Lower	Upper	
Penalty	70	80	£5m penalty payable pro-rata to performance within the band. £0.5m/percent

## 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 would be applicable on an annual basis if performance drops.
Form of reward/penalty	Adjustment to revenue. A variable penalty beginning at zero if performance drops to 80% rising to £5m if it drops to 70%.
Any other information or clarifications relevant to correct application of incentive	

## Explanation of intervention made

Intervention made	Rationale for change	Evidence used
The penalty calculation (£5m penalty pro rate to performance) has been replaced by a rate (£0.5m/percent)	The penalty proposed by the company did not comply with the July methodology.	The new penalty rate has been calculated so as to provide the same maximum penalty in 2019-20.

## Performance commitment: 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 the company.

**Incentive type**

Reputational.

**Performance commitments**

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

**Incentive rates**

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Reputational	n/a	n/a	n/a

**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: affordable prices

### Performance commitment: affordable bills

#### Detailed definition of performance measure

The extent to which the company continues 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
Performance commitments	n/a	Below inflation	1% below inflation	1% below inflation	1% below inflation	1% below inflation	1% below inflation

#### Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Reputational	n/a	n/a	n/a

#### 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.

## Non-household retail outcome: developing our people

### Performance commitment: health and safety

#### Detailed definition of performance measure

~~Number of reported injuries under RIDDOR. PC has been removed.~~

#### Incentive type

~~Reputational. PC has been removed~~

#### Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Performance commitments	Reportable injuries within RIDDOR	4	4	4	4	4	0

#### Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Reputational	n/a	n/a	n/a

#### Additional details

Necessary detail on measurement units	<del>The annual reportable injuries within RIDDOR</del>
Frequency of PC measurement and any use of averaging	<del>Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report'</del>

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	<del>Performance levels are set on a retail (household &amp; non household) wide basis.</del>

### Explanation of intervention made

Intervention made	Rationale for change	Evidence used
The PC has been removed	The proposed incentives focus on specific company inputs rather than on delivering the outcomes that customer want.	N/A

## Performance commitment: competence for role

### Detailed definition of performance measure

Staff are evaluated annually through performance management reviews against an internal competency framework, assessing skills and knowledge applicable to their role. This measure is the percentage of staff who are assessed as fully competent at the end of the year. PC has been removed

### Incentive type

Reputational. PC has been removed

### Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Performance commitments		86	86	88	94	93	95

### Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Reputational	n/a	n/a	n/a

### Additional details

Necessary detail on measurement units	% of staff who are fully competent in their role.
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	<del>Performance levels are set and shown on a company-wide basis.</del>

## Non-household retail outcome: business efficiency

### Performance commitment: operating efficiency

#### Detailed definition of performance measure

~~A cumulative % reduction of controllable costs. PC has been removed~~

#### Incentive type

~~Reputational. PC has been removed~~

#### Performance commitments

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Performance commitments	Cumulative – % of controllable costs	0	4	8	12	16	16

#### Incentive rates

Incentive type	Performance levels		Incentive rate
	Lower	Upper	
Reputational	n/a	n/a	n/a

#### Additional details

Necessary detail on measurement units	<del>To minimise the cost of service delivery through a combination of innovation and the adoption of best practice.</del>
Frequency of PC measurement and any use of averaging	<del>Performance commitment measured and reported on an annual basis through the company's 'Annual Service and Outcome Delivery Report'</del>

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	<del>Performance levels are set on a retail (household &amp; non household) wide basis</del>

### Explanation of intervention made

Intervention made	Rationale for change	Evidence used
The PC has been removed	The proposed incentives focus on specific company inputs rather than on delivering the outcomes that customer want.	N/A

## Annex 2 Wholesale costs

### Establishing draft determination thresholds

We have developed cost models that explain the patterns of historical costs across companies, and have combined these with forecasts/projections of the model explanatory variables and efficiency assumptions to derive basic cost thresholds (BCTs) for each company. Further details can be found in the [basic cost threshold model description](#), our enhanced DD technical appendix and the [basic cost threshold feeder models for Dŵr Cymru](#) published alongside this draft determination.

We have then made three categories of adjustments to these basic cost thresholds.

- **Policy additions** – which reflect areas of costs excluded from the base modelling across all companies or adjustments necessary to ensure comparisons with business plan forecasts of totex are made on a like-for-like basis (such as the third party cost and gross/net adjustments).
- **Unmodelled allowances** – to cover areas of enhancement spending not covered by the enhancement modelling (but implicitly included in two out of the three approaches to water cost modelling that are based on a totex approach – hence, the final adjustment to the water cost threshold is  $\frac{1}{3}$  of the total).
- **Deep-dive adjustments** – to capture those special aspects of business plans not provided for in the base cost thresholds, policy additions and unmodelled allowances. These are explained in more detail in the cost templates published alongside this document.

Taken together, these adjustments translate the BCT to draft determination thresholds.

Where companies made arguments in business plans for special aspects of their plans and we assessed these in detail but decided that it was not appropriate to adjust the cost thresholds, then these have been categorised as ‘deep dives not added’.

We have summarised the above in the tables that follow – together with revised business plan forecast totex and the difference between the forecast and the draft determination threshold.

## Explanatory Variables

In A2 of our enhanced DD technical appendix we highlighted that **‘where the expenditure within companies’ business plans is below our cost thresholds we equally need to consider whether the threshold is an appropriate baseline for setting prices. This approach will help to ensure that customers’ interests are protected.’**

South West Water's forecasts of water totex were approximately 16% below the relevant risk-based review cost threshold. To address these issues and reflect the greater confidence that we had in enhanced plans, we substituted South West's forecasts of its water explanatory variables in to our calculations in order to derive a revised cost threshold for its draft determination. On this basis South West's forecast water totex was approximately 7% below the cost threshold. We adopted a similar approach to Affinity Water but it left the cost threshold virtually unchanged (its forecast water totex was about 5% below the risk-based review cost threshold and on the basis of its forecasts of explanatory variables about 4% below the draft determination cost threshold).

We did not adopt this approach for wastewater because no company had forecast totex significantly below the risk-based review cost thresholds, and because of the complications caused by the interactions between National Environment Programme phases 3, 4 and 5 in interpreting company forecasts of explanatory variables.

We also noted that, for non-enhanced companies, **‘we may need to adapt our initial cost thresholds for use in menu baselines, in particular where other companies business plan forecast levels of totex were significantly below the initial risk-based review cost threshold levels’.**

For this draft determination, Dŵr Cymru is relatively close to the cost thresholds (that is, within 2%) for water. We therefore do not regard the difference as warranting additional intervention to protect the interests of customers. We have therefore not substituted the company's forecasts of its water explanatory variables in to our calculations in order to derive a revised cost threshold for its draft determination.

We will, however, need to consider these issues further in the remaining draft determinations due to be published at the end of August. For instance in the risk-

based review Thames Water was about 16% below the water cost threshold and Yorkshire Water was about 10% below the water cost threshold. Companies may also move in relation to the cost thresholds, as modelling and allowances for the remaining draft determinations are finalised, and so other companies may also become significantly below a cost threshold.

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**Table A27 Movement from basic cost threshold to draft determination threshold for wholesale water totex**

Basic cost threshold (£m)	Policy additions (£m)	Unmodelled costs adjustment (£m)	Deep dive (£m)	Wider business plan adjustments	Draft determination threshold (£m)	Deep dives not added
1091.0	127.2	18.0	n/a	n/a	1236.2	n/a

**Table A28 Policy additions to the wholesale water basic cost threshold**

Business rates (£m)	Pension deficit payments (£m)	Third party costs (£m)	Open market costs (£m)	Net v gross adjustments (£m)	Total (£m)
83.2	3.3	40.7	0.0 <sup>1</sup>	-	127.2

1. **Note:** We have not made an allowance for market opening costs for Dŵr Cymru, therefore the 2014-15 amount is zero.

**Table A29 Comparison of company wholesale water totex with the draft determination threshold and 2010-15 totex**

Plan (£m)	DD threshold (£m)	Gap (£m)	Plan v 2010-15
1,240.2	1,236.2	4.0	-101.8

**Table A30 Movement from basic cost threshold to draft determination threshold for wholesale wastewater totex**

Basic cost threshold (£m)	Policy additions (£m)	Unmodelled costs adjustment (£m)	Private sewage pumping stations (£m)	NEP5 (£m)	Deep dive (£m)	Wider business plan adjustments	Draft determination threshold (£m)	Deep dives not added
1210.7	58.8	12.8	22.7	65.0	n/a	n/a	1370.1	n/a

**Table A31 Policy additions to the wholesale wastewater basic cost threshold**

Business rates (£m)	Pension deficit payments (£m)	Third party costs (£m)	Open market costs (£m)	Net v gross adjustments (£m)	Total (£m)
56.7	2.1	0.0	0.0 <sup>1</sup>	-	58.8

**Note:**

1. We have not made an allowance for market opening costs for Dŵr Cymru, therefore the 2014-15 amount is zero.

**Table A32 Comparison of company wholesale wastewater totex with the draft determination threshold and 2010-15 totex**

Plan (£m)	DD threshold (£m)	Gap (£m)	Plan v 2010-15
1,329.0	1,370.1	-41.1	104.3

## Menu regulation

The approach to menu regulation for the non-enhanced companies was summarised in ‘[Setting price controls for 2015-20 – policy and information update](#)’. Table A32 reproduces the draft menu for non-enhanced companies from this document and we confirm that this is the menu we used for the draft determination for Dŵr Cymru.

**Table A33 Draft menu for Dŵr Cymru**

Company menu choice	80	85	90	95	100	105	110	115	120	125	130
Cost sharing rate	54%	53%	52%	51%	50%	49%	48%	47%	46%	45%	44%
Allowed expenditure	95.00	96.25	97.50	98.75	100.00	101.25	102.50	103.75	105.00	106.25	107.50
Additional income	2.30	1.76	1.20	0.61	0.00	-0.64	-1.30	-1.99	-2.70	-3.44	-4.20
Actual expenditure	Reward/penalty										
70	15.8	15.7	15.5	15.3	15.0	14.7	14.3	13.9	13.4	12.9	12.3
80	10.4	10.4	10.3	10.2	10.0	9.8	9.5	9.2	8.8	8.4	7.9
85	7.7	7.7	7.7	7.6	7.5	7.3	7.1	6.8	6.5	6.1	5.7
90	5.0	5.1	5.1	5.1	5.0	4.9	4.7	4.5	4.2	3.9	3.5
95	2.3	2.4	2.5	2.5	2.5	2.4	2.3	2.1	1.9	1.6	1.3
100	-0.4	-0.2	-0.1	0.0	0.0	0.0	-0.1	-0.2	-0.4	-0.6	-0.9
105	-3.1	-2.9	-2.7	-2.6	-2.5	-2.5	-2.5	-2.6	-2.7	-2.9	-3.1
110	-5.8	-5.5	-5.3	-5.1	-5.0	-4.9	-4.9	-4.9	-5.0	-5.1	-5.3
115	-8.5	-8.2	-7.9	-7.7	-7.5	-7.4	-7.3	-7.3	-7.3	-7.4	-7.5
120	-11.2	-10.8	-10.5	-10.2	-10.0	-9.8	-9.7	-9.6	-9.6	-9.6	-9.7
125	-13.9	-13.5	-13.1	-12.8	-12.5	-12.3	-12.1	-12.0	-11.9	-11.9	-11.9
130	-16.6	-16.1	-15.7	-15.3	-15.0	-14.7	-14.5	-14.3	-14.2	-14.1	-14.1
140	-22.0	-21.4	-20.9	-20.4	-20.0	-19.6	-19.3	-19.0	-18.8	-18.6	-18.5

All figures, except for the cost sharing rate represent percentages of the company’s baseline expenditure amount. Cells highlighted in blue represent the maximum reward that can be obtained for a given level of actual expenditure.

## Annex 3 Household retail price control

### Industry ACTS

Using the general approach described in [the enhanced DD technical appendix], we have calculated the industry ACTS for unmeasured customers, and the average additional CTS for metered customers for this draft determination for Dŵr Cymru using the relevant information we have available at this time. These are set out in the table below.

**Table A34 Industry ACTS and average additional CTS metered customers (2012-13 prices)**

	Units	Value <sup>1</sup>
Industry ACTS for unmetered single service customers	(£/cust 2 d.p.)	21.78
Industry ACTS for unmetered water and sewerage customers	(£/cust 2 d.p.)	28.31
Industry ACTS for metered water-only customers	(£/cust 2 d.p.)	27.95
Industry ACTS for metered sewerage-only customers	(£/cust 2 d.p.)	25.17
Industry ACTS for metered water and sewerage customers	(£/cust 2 d.p.)	34.65

**Note:**

1. There will be no indexation for retail price controls from this price base.

Using the above average industry allowances per customer, and the projected customer numbers in its revised business plan, we have calculated the total allowed household retail revenues in 2012-13 prices for Dŵr Cymru, including the allowed uplifts for the efficiency glide path and the household retail net margin as set out in table A22.

## Revenue modification

Total allowed revenues are based on the number of customers and meter penetration set out in companies' business plans. If actual customer numbers or meter penetration differ from forecast values, then a modification will be made to allowed revenues to account for this.

Table A35 below sets out the amount per customer that allowed revenues will be modified by if outturn customer numbers differ from forecast customer numbers. This is set for each of the customer types.

These modification factors include an allowance for the net margin. This allowance is based on forecast nominal wholesale charges. These modification factors will not be updated for differences between forecast and actual nominal wholesale charges. This is because doing so would make the calculation of these modification factors, each year, considerably more complex and less transparent. We consider that setting these modification factors out in advance and not varying them for changes in wholesale is a more proportionate approach.

For example, consider the case where the number of unmetered water only customers is lower than forecast, and the number of metered water only customers is higher than forecast as a result of a more rapid meter roll out than anticipated. We would make a downward adjustment for revenue for unmetered water only customers, and a more than offsetting upward adjustment for metered water only customers.

The first table sets out what these modification factors are; the second sets out the baseline number of customers.

**Table A35 Household retail allowed revenue modification factors by class of customer**

	Units	2015-16	2016-17	2017-18	2018-19	2019-20
Revenue modification per unmetered water only customer	(£/customer)	31.30	30.22	29.08	27.96	27.81
Revenue modification per unmetered wastewater only customer	(£/customer)	31.30	30.22	29.08	27.96	27.81
Revenue modification per unmetered water and wastewater customer	(£/customer)	40.69	39.29	37.80	36.35	36.16
Revenue modification per metered water only customer	(£/customer)	35.21	33.83	32.64	31.52	31.36
Revenue modification per metered wastewater only customer	(£/customer)	35.22	33.85	32.63	31.52	31.37
Revenue modification per metered water and wastewater customer	(£/customer)	44.61	42.91	41.36	39.91	39.70

**Note:**

There will be no indexation for retail price controls from this price base.

**Table A36 Assumed number of customers for household retail total revenues**

	Units	2015-16	2016-17	2017-18	2018-19	2019-20
Number of unmetered water only customers	'000s (3 d.p.)	53.2	52.8	52.4	52.0	51.6
Number of unmetered wastewater only customers	'000s (3 d.p.)	58.3	57.9	57.5	57.1	56.7
Number of unmetered water and wastewater customers	'000s (3 d.p.)	688.9	671.8	655.1	638.8	623.0
Number of metered water only customers	'000s (3 d.p.)	26.1	27.0	27.8	28.7	29.6
Number of metered wastewater only customers	'000s (3 d.p.)	67.2	68.0	68.9	69.7	70.6
Number of metered water and wastewater customers	'000s (3 d.p.)	472.6	495.4	518.1	540.7	563.3

## Annex 4 Reconciling 2010-15 performance

### Wholesale adjustments

In this annex, we set out the draft determination adjustments to 2015-20 price controls resulting from the company's actual performance during the 2010-15 period.<sup>2</sup>

Tables A37 and A38 below compare 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. Our view reflects our understanding of the company's performance using these incentives, based on information provided in its revised business plan and subsequent query responses. The tables also show other adjustments such as those relating to tax.

We then consider each of the different legacy adjustments.

**Table A37 Revenue adjustments in the water service 2015-20**

£ million	Revenue adjustments 2015-20	
	Company view	Ofwat view
Service incentive mechanism (SIM)	1.610	2.978
Revenue correction mechanism (RCM)	18.225	17.644
Opex incentive allowance – post-tax (OIA)	0.000	0.000
Capital expenditure incentive scheme (CIS)	-50.540	-52.903
Tax refinancing benefit clawback	0.000	0.000

<sup>2</sup> The update of 2013-14 actual and 2014-15 forecast expenditure submitted in the revised business plan is not fully assured data. Should there be any changes in the assurance updates we will reassess 2010-15 performance and make changes where appropriate. Where these changes are material to price limits we will publish an update to allow stakeholders to make representations before the final determinations.

£ million	Revenue adjustments 2015-20	
	Company view	Ofwat view
Other tax adjustments	0.000	0.000
Equity injection clawback	0.000	0.000
Other adjustments	0.000	0.000
Total wholesale water legacy adjustments	-30.705	-32.281

**Note:**

Totals may not add up due to rounding.

**Table A38 Revenue adjustments in the wastewater service 2015-20**

£ million	Revenue adjustments 2015-20	
	Company view	Ofwat view
Service incentive mechanism (SIM)	1.975	3.866
Revenue correction mechanism (RCM)	16.715	15.558
Opex incentive allowance – post-tax (OIA)	0.000	0.000
Capital expenditure incentive scheme (CIS)	-36.950	-38.294
Tax refinancing benefit clawback	0.000	0.000
Other tax adjustments	0.000	0.000
Equity injection clawback	0.000	0.000
Other adjustments	0.000	0.000
Total wholesale wastewater legacy adjustments	-18.260	-18.869

**Note:**

Totals may not add up due to rounding.

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 A48. 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 tables A6 and A14.

Our view of the adjustments reflects our understanding of the company's performance using these incentives, based on information provided in its revised business plan and subsequent query responses.

## Service incentive mechanism (SIM)

This draft determination includes our provisional view<sup>3</sup> of the company's SIM reward, which we have calculated as 0.2%. The company's revised business plan included an estimated reward of 0.1%.

We have arrived at this by comparing the company's actual SIM performance in 2011-12, 2012-13 and 2013-14, to the industry three-year average performance during 2011-14. Table A39 contains the annualised rewards from the company's SIM performance.

**Table A39 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

## Revenue correction mechanism (RCM)

For PR09, we introduced the RCM to provide companies with a financial incentive to encourage consumers to use water wisely and to correct for differences between expected and actual tariff basket revenue between 2010 and 2015 at PR14. We confirmed the details of our revenue correction mechanism in [PR09/31, 'Revenue correction mechanism'](#) (July 2009).

<sup>3</sup> When we publish the draft determinations for all remaining companies in August we will set out in more detail the SIM rewards.

Using the revenue correction mechanism, described in our PR09 methodology paper, we will make revenue adjustments at this price review to take account of each company's revenue outperformance or underperformance relative to the assumptions we made in our final determinations for 2010-11 to 2014-15. This adjustment will be annualised over the five years in net present value (NPV) terms.

In IN 11/04, '[Simplifying the revenue correction mechanism](#)', we summarised our decision to simplify two areas of the RCM; in particular, the 'billing incentive' and 'back billing'. The [supporting information](#) to IN11/04 provides the technical detail to these changes.

This draft determination includes our view of the company's RCM annualised adjustment amounts as detailed in table A40 below.

**Table A40 RCM annualised adjustments to 2014 price review requirement**

£ 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	3.529	3.529	3.529	3.529	3.529	17.644
Wastewater	Company view	3.343	3.343	3.343	3.343	3.343	16.715
	Ofwat view	3.112	3.112	3.112	3.112	3.112	15.558

We have taken a different view to the company in relation to the following areas:

- Revised business plan tables W17 and S17** – 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 and so was no longer consistent with the data and model. In the absence of a coherent data set and commentary, our draft determination uses the company's resubmitted May 2014 tables.
- Number of households billed** – 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. For our draft determination we have used the data the company submitted in business plan table R3 to calculate our view of the RCM adjustment.

- **FD09 assumptions** – there are inconsistencies between the company's and our view of the FD09 assumptions used in the populated RCM model. The draft determination includes our view of the FD09 assumptions.
- **Outturn financial year average RPI** – there are inconsistencies with the outturn financial year average RPI between table A9 and the RCM spreadsheet. We have applied the data that the company has submitted in business plan table A9 to calculate our view of the RCM adjustment.

## Operating expenditure incentive allowance (OIA)

In accordance with the methodology set out in PR09/04, 'The opex incentive allowance and the outperformance multiplier for 2005-10', the company did not demonstrate the year-on-year outperformance needed to qualify for an incentive allowance in price limits in either the water or wastewater service. Our analysis confirms the company's position. Table A41 below summarises the company's view and our view of the incentive allowances for 2015-20.

**Table A41 Operating expenditure incentive allowances for 2015-20**

£ million		2015-16	2016-17	2017-18	2018-19	2019-20	Total
<b>Water service</b>							
Incentive allowance (pre-tax)	Company view	0.000	0.000	0.000	0.000	0.000	0.000
	Ofwat view	0.000	0.000	0.000	0.000	0.000	0.000
Incentive allowance (post-tax)	Company view	0.000	0.000	0.000	0.000	0.000	0.000
	Ofwat view	0.000	0.000	0.000	0.000	0.000	0.000
<b>Wastewater service</b>							
Incentive allowance (pre-tax)	Company view	0.000	0.000	0.000	0.000	0.000	0.000
	Ofwat view	0.000	0.000	0.000	0.000	0.000	0.000
Incentive allowance (post-tax)	Company view	0.000	0.000	0.000	0.000	0.000	0.000
	Ofwat view	0.000	0.000	0.000	0.000	0.000	0.000

## Change protocol (logging up, logging down and shortfalls)

The change protocol for 2010-15 is a process by which a company can request a logging up of capital costs (capex) as a result of new or changed output obligations during the current price control period or a logging down of capex costs for outputs no longer required. We take account of the financial implications of these changes at the beginning of the next price control period. Where a company fails to deliver on time any outputs which are required and were included in price limit assumptions, a shortfall adjustment is made.

The company's business plan tables W13 and S13 contained one shortfall claim in the water service for lower than expected meter replacement and three logging up claims in the wastewater service relating to private sewers, Welsh Government mandatory build standards and the Habitats Directive programme. With the exception of the claim for Welsh Government mandatory build standards, all claims passed the triviality threshold of representing 2% or more of service turnover.

We set out below our post-efficiency draft determination assumptions and our assessment of each of the company's capital expenditure claims:

- **Meter maintenance shortfall (-£6.255m)** – we have 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.
- **Private sewers logging up (£28.402m)** – we have accepted the company's pre-efficiency adjustments for this claim. For inclusion in our CIS reconciliation, we have applied the profile of FD09 enhancement efficiencies to the relative proportions of annual infrastructure and non-infrastructure expenditure as stated by the company.
- **Welsh Government mandatory build standards logging up (£0.000m)** – We have rejected this claim as the cost is trivial.
- **Habitats NEP logging up (£21.563m)** – we have accepted the company's pre-efficiency adjustments for this claim. For inclusion in our CIS reconciliation, we have applied the profile of FD09 non-infrastructure enhancement efficiencies to the annual adjustments.

Based on the evidence presented in the company's revised business plan, we have reviewed the company's delivery of FD09 outputs and have determined a further adjustment.

- **Water infrastructure serviceability shortfall (-£32.341m)** – the company has not maintained stable serviceability during the 2010-15 period due to its DG3 performance >12 hours supply interruptions which have been consistently above the upper control limit. We discuss this in more detail in the serviceability performance section below.

Table A42 below summarises the company's view and our baseline view of total adjustments to capex included in the CIS reconciliation, expressed post efficiency and in 2012-13 prices.

**Table A42 Summary of post-efficiency capex for logging up, logging down and shortfalls included in the CIS reconciliation**

2009-10 to 2014-15 £m – post-efficiency capex	Water service		Wastewater service		Total service	
	Company view	Baseline view	Company view	Baseline view	Company view	Baseline 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

**Notes:**

1. Includes two-sided adjustments from the PR09 agreed overlap programme as set out in table A46.
2. 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 A43 below summarises the company's view and Ofwat's view of the total adjustments made to the FD09 opex assumptions used in the calculation of the opex incentive revenue allowances.

**Table A43 Summary of post-efficiency opex for logging up, logging down and shortfalls included in the opex incentive allowance calculation**

2009-10 to 2014-15 £m – 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

The logging up adjustments to opex above relate to private sewers. We have accepted the company's pre-efficiency values, but we have 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.

## Serviceability performance

All companies must maintain their asset systems so that they remain fit for purpose over the long term. This is so the companies can continue to maintain the flow of services to consumers, while protecting the environment and public health. For the 2009 price review we set out our expectations on the measurement and management of serviceability. We defined values for reference levels and control limits for each serviceability indicator that will underpin, and inform our assessment of, the achievement of our required output of stable serviceability. To deliver this output, we expected the company to monitor, manage and maintain its assets so that the serviceability indicators set out in the company's supplementary report remain within a set range of control limits oscillating around a central reference level.

A company should assume it is at risk of a shortfall adjustment at this price review if serviceability is assessed as less than stable in any year from 2011/12 onwards. Any company whose serviceability we assess as less than stable in 2013/14 should

assume a shortfall at this price review. The value of the shortfall can be up to 50% of the company's capital maintenance sub-service expenditure assumed at FD09 price control.

We have reviewed both the company's actual and forecast performance information provided in its revised business plan for the defined serviceability measures and the company's overall assessments.

The company's performance on DG3 >12 hours supply interruptions has been consistently above the upper control limit during the period 2010-15. Evidence provided in the company's revised business plan and subsequent query response, clarified that DG3 supply interruptions data had changed as a result of an ongoing casework issue within the company's south west region. The data confirmed that serviceability has not been stable for the full five years of the control period.

On that basis, we have initiated a scaled shortfall claim for this single indicator, based upon the distance the company's data is above the upper control limit in each year. Due to the high level of this particular indicator over a sustained period the calculated value of this shortfall exceeded the maximum value of 50% of the subservice total, we have therefore capped the level of the shortfall that could be applied.

Table A44 below confirms our assessments and table A45 confirms the value and impact of any serviceability shortfall on the RCV.

**Table A44 Serviceability assessments for 2010-15<sup>4</sup>**

£m		2010-11	2011-12	2012-13	2013-14	2014-15 <sup>5</sup>
Water infrastructure	Company view	Stable	Stable	Stable	Stable	Stable
	Ofwat view	Stable	Marginal	Marginal	Marginal	Marginal

<sup>4</sup> Assessments are based on actual and forecast performance submitted in the company's revised business plans.

<sup>5</sup> Assessments for 2014-15 are based on forecast data and are subject to review once actual performance data becomes available.

£m		2010-11	2011-12	2012-13	2013-14	2014-15 <sup>5</sup>
Water non infrastructure	Company view	Stable	Stable	Stable	Stable	Stable
	Ofwat view	Stable	Stable	Stable	Stable	Stable
Wastewater infrastructure	Company view	Stable	Stable	Stable	Stable	Stable
	Ofwat view	Stable	Stable	Stable	Stable	Stable
Wastewater non-infrastructure	Company view	Stable	Marginal	Stable	Stable	Stable
	Ofwat view	Stable	Marginal	Stable	Stable	Stable

**Table A45 Impact of serviceability shortfalls on the RCV**

2009-10 to 2014-15 (£m)		Water	Wastewater	Total
Amount subtracted from RCV (£m)	Company view	0.000	0.000	0.000
	Ofwat view	32.341	0.000	32.341

### The 2009 agreed overlap programme

As the company did not propose an overlap programme at PR09, our FD09 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. Table A46 below confirms the zero assumptions included in this draft determination.

**Table A46 PR09 agreed overlap programme adjustments and assumptions**

£m		2010-15		2015-20	
		Two-sided adjustment for inclusion in the CIS		Expenditure forecasts to complete the projects	
		Capex	Opex	Capex	Opex
Water service	Company view	0.000	0.000	0.000	0.000
	Baseline view	0.000	0.000	0.000	0.000
Wastewater service	Company view	0.000	0.000	0.000	0.000
	Baseline view	0.000	0.000	0.000	0.000

## The 2014-15 transition programme

For this price review, we introduced the transition programme to enable companies to bring forward any type of planned capital expenditure from 2015-16 into 2014-15, in order to make more efficient use of resources and the supply chain.

In its revised business plan, the company identified a small amount of transition capital expenditure relating to the following activities:

- progress scheme development and design, to enable an early start on the intake fish screens programme and the enhancement scheme at Bryn Cowlyd WTW;
- to enable installation of monitoring equipment and early commencement of reservoir modelling in drinking water protected areas, to ensure the company meets the deadline in the National Environment Programme of March 2017;
- progress the maintenance and growth elements of the major growth scheme at Chester WWTW to target costs stage;
- progress scheme development to target price setting on the work at Llanberis WWTW;
- enable development and partial delivery of a phosphorous removal scheme at Crosshands WWTW; and
- enable early start on developing the next phase of works to reduce risk of non-compliance with the UWWTD and undertake enhancements driven by the Shellfish Waters Directive around Llanelli/Gowerton.

We have accepted the company's proposals for all of its transition expenditure. This capital expenditure is excluded from the CIS reconciliation but is included in the baseline for 2015-20. Table A47 below confirms the proposed programme for the water and wastewater services.

**Table A47 Transition programme in 2014-15**

Net capital expenditure	2014-15 (£m)	Proportion of forecast in 2014-15	Proportion of capital programme in 2015-20
Water service	2.649	1.71%	0.41%
Wastewater service	3.410	2.20%	0.42%

### Capital expenditure incentive scheme (CIS)

This draft determination includes the capital incentive scheme (CIS) adjustments to revenue and to RCV that arise from our assessment of the company's performance under the CIS mechanism in the 2010-15 period. The CIS adjustments reflect actual capital expenditure performance during 2010-11 to 2013-14 and predicted expenditure in 2014-15 (as submitted in tables W15 and S15 in the company's revised business plan) which is compared to the assumptions for 2010-15 we used in our final determination at PR09. The CIS assessment reflects, where necessary, the adjustments under the change protocol (as detailed in table A42) and the 2009 agreed overlap programme (as detailed in table A46).

Table A48 provides details of the CIS ratios and performance incentive. It also gives the monetary amounts of the CIS performance reward or penalty, the true-up adjustment to 2015-20 allowed revenues and the midnight adjustment to the closing 2014-15 RCV.

**Table A48 Water and wastewater legacy true-up adjustments**

		Water service	Wastewater service	Total service
<b>Restated FD09 CIS bid ratio</b>	Company view	105.86	105.36	
	Ofwat view	105.86	105.50	
<b>Outturn CIS ratio</b>	Company view	138.00	119.61	

		Water service	Wastewater service	Total service
	Ofwat view	137.34	119.19	
Incentive reward/penalty %	Company view	-10.28	-5.47	
	Ofwat view	-10.10	-5.33	
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	Company view	-47.058	-34.405	-81.463
	Ofwat view	-49.260	-35.657	-84.917
CIS adjustment to RCV £m	Company view	157.956	120.443	278.400
	Ofwat view	157.931	120.421	278.352

**Notes:**

The restated FD09 CIS bid ratio takes account of the adjustments for the change protocol (table A42) and the 2009 agreed overlap programme (table A46).

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.

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 draft determination.

In Table A49 below we have set out the profiled values of the revenue adjustments in each year 2015-20. The profile we have adopted for this draft determination is consistent with the profile proposed by the company in its revised business plan.

**Table A49 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	-10.581	-10.581	-10.581	-10.581	-10.581	-52.903
Wastewater	Company view	-7.390	-7.390	-7.390	-7.390	-7.390	-36.950
	Ofwat view	-7.659	-7.659	-7.659	-7.659	-7.659	-38.294

## **Tax refinancing benefit clawback**

The company did not include a tax refinancing benefit clawback adjustment because of in-period changes in its capital structure. We have therefore made no adjustment for this item.

## **Other tax adjustments**

The company did not propose any other tax adjustments in its revised business plan.

## **Equity injection clawback**

The company did not receive an allowance for an equity injection for 2010-15; therefore, we have made no adjustment for this item.

## **Other adjustments**

The company did not propose any other adjustments in its revised business plan.

**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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