

2014 Price Review
Business Plan Supporting Appendices
Outcomes and Incentives

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Executive Summary

This appendix provides an overview of the approach followed to prepare this business plan and provides the detail behind the outcomes, performance commitments and outcome delivery incentives we have proposed.

We have chosen to embrace the concept of outcomes in our business plan for 2015-20. We have developed outcomes that directly relate to the customers' satisfaction on the service they receive. This is a different approach compared to the historical method of measuring either activity or service failures, but this approach will allow us to use a wide ranging set of actions to improve customers' satisfaction, not just focusing on the traditional output but engaging with customers in a more effective way as well. We believe this approach can bring a change in culture and improve our relationship with our customers.

Outcomes Development

The outcomes we propose have been developed from our extensive customer research programme utilising 11 separate pieces of research and are directly linked to priorities our customers identified.

As well as our customer driven outcomes we recognise and acknowledge the importance of our statutory obligations and obligations to our other stakeholders and the environment and also to the long term sustainability of the service we provide and the environment, therefore we have also developed a suite of 'compliance' and 'sustainability' outcomes that will ensure we meet our statutory obligations and provide long term security of supply for customers.

Performance Commitments

Our early thinking led us to begin discussions with a wide group of stakeholders on our proposal to move almost entirely to customer satisfaction based outcomes, measures and incentives. Whilst we have received considerable support for this approach not least from our Customer Challenge Group (CCG) there was some acknowledgement that it might be more appropriate to create a mix of satisfaction and output based measures for this business plan.

As this approach is new and innovative and therefore carries a different level of risk when compared to the more traditional measures and to take account of stakeholders feedback, for this price review a combined approach of performance measures based on customer satisfaction and output measures is proposed.

The outcomes we proposed have been developed from our extensive customer research programme, as have the performance commitments associated with them. The performance commitments reflect the satisfaction with current levels of service and the lack of willingness to pay for any improvements to service.

The responsibility of delivering our performance commitments is split between the retail and wholesale business plans because we recognise both play a part in delivering customer satisfaction. This weighting is based on the contribution retail and wholesale will have in meeting each specific outcome.

Outcome Delivery Incentives

We have embarked on an approach that drives incentives based on a change in the level of customer satisfaction. We believe this approach can bring a change in culture and improve our relationship with our customers, much like we have seen as a result of the introduction of the Service Incentive Mechanism (SIM). This has therefore been the starting point for the development of the incentive package within the business plan.

Designing the incentives was an important process, and so we set six objectives to guide us in this piece of work:

1. The incentives need to relate to customers' priorities;
2. The size and balance of the incentives need to reflect the value customers' place on the outcome;
3. The size of the incentive needs to be sufficient to drive changes in our culture and performance, but should not be so large as to cause a disproportionate risk to the returns we need to make to our investors;
4. The incentive size and phasing need to reflect the innovative and as yet untested nature of this approach;
5. The retailer and wholesaler should share, proportionally, the incentive so it reflects the part each one plays in achieving the relevant outcome;
6. The incentives should contain a mix of satisfaction measures and more traditional targets to provide an appropriate performance and risk balance.

Clearly the design and power of the incentives proposed reflects the relative infancy of this approach as does the size of the proposed penalties. It will also need to deal adequately with extraneous effects on the satisfaction score provided by customers and ensure it meets the objectives of financeability and risk reward balance.

We have carried out Return on Regulatory Equity (RoRE) analysis on the proposed outcome delivery incentives (ODIs), analysing the upside and downside risk of a reasonable best and worst case scenario. The analysis includes the outcome delivery incentives, cost efficiency incentive and the Service Incentive Mechanism. In addition to these incentive mechanisms, we are proposing to share debt outperformance with customers, this is not included in the RoRE analysis but should be considered in the context of interpreting the results.

The RoRE analysis confirms a maximum ODI of total downside -1.0% per annum and upside of +0.5% per annum, excluding SIM, represents an appropriate risk-reward balance. The balance between the upside and the downside is appropriate and the balance between the incentives is appropriate.

The shape of the incentive range is supported by the value customers have told us they place on the service via outcomes research but also via our primary willingness to pay research. The range is also consistent with that applied in the Service Incentive Mechanism, a range that has been sufficient to drive a change in culture and behaviour in terms of customer service. This package provides sufficient incentive for us to perform and deliver the commitments proposed whilst ensuring the appropriate risk balance between customer and shareholder.

The overall ODI package, including the Service Incentive Mechanism is -2.0% to +1.0% of turnover per annum or -£20.4m to +£10.2m over 2015-20. However, given the risks identified with this new approach we propose a phased introduction of the ODI on our satisfactions measures. We have introduced financial incentives on our satisfaction measures from year 3 onwards. As a result the maximum incentive in place is -£17.2m to +£7.1m over 2015-20.

The resulting outcomes, performance commitments and incentives are shown in Table 1.

Table 1 Outcome Scorecard

Outcome	Performance Measure	Incentive Proposed	Current Performance Baseline	Performance Commitment 2019-20	Financial Incentive £m Revenue over 2015-20		Incentive Weighting	
					Penalty	Reward	Retail	Wholesale
CUSTOMER OUTCOMES								
Customers consider the appearance of their water to be acceptable	Customer Satisfaction Score (out of 5)	Reputational & Financial	4.6	4.6	0.3	0.1	10%	90%
Customers consider the taste and odour of their water to be acceptable	Customer Satisfaction Score (out of 5)	Reputational & Financial	4.3	4.3	0.3	0.4	10%	90%
Customers consider the level of leakage to be acceptable	Customer Satisfaction Score (out of 5)	Reputational & Financial	3.6	4.0	0.3	0.9	30%	70%
	Regulatory leakage target	Reputational	93.2 (Target 94 MI/d)	88.1 MI/d	No financial incentive			
Customers consider their direct interaction experience to be positive	Customer Satisfaction Score (out of 5)	Reputational & Financial	4.5	4.5	0.3	0.1	80%	20%
	Service Incentive mechanism	Reputational & Financially incentivised via existing mechanism	72.7	> 80	10.2	5.1	60%	40%
Customers consider bills to be value for money and affordable	Customer Satisfaction (%)	Reputational	72%	> 80%	No financial incentive			
Customers consider their water supply is of sufficient pressure	Customer Satisfaction Score (out of 5)	Reputational & Financial	4.5	4.5	0.3	0.2	10%	90%
	Number of properties at risk of low pressure	Reputational	62	60 properties	No financial incentive			
Customers consider the frequency and duration of supply interruptions is acceptable	Customer Satisfaction Score (out of 5)	Reputational & Financial	4.7	4.7	0.3	0.0	10%	90%
	Average time lost per property	Reputational	13 minutes	< 13 minutes	No financial incentive			
Customers consider the frequency of water use restrictions to be acceptable	Customer Satisfaction Score (out of 5)	Reputational & Financial	4.1	4.1	0.3	0.4	10%	90%
	Meeting demand for water (Measured by Security of Supply Index)	Reputational & Financial	100	100	0.2	0.0	0%	100%
COMPLIANCE OUTCOMES								
We are compliant with water quality regulations	% Mean zonal compliance	Reputational	99.96%	100%	No financial incentive			
We are compliant with environmental obligations	Number of breaches of abstraction licences, discharge consents and environmental permits	Reputational	Zero	Zero	No financial incentive			
	Number of pollution incidents (Cat 1-2)	Reputational	Zero	Zero	No financial incentive			
We are compliant with National Security obligations	Number of compliance breaches	Reputational	Zero	Zero	No financial incentive			
We are compliant with health and safety regulations	Number of compliance breaches of legislation	Reputational	Zero	Zero	No financial incentive			
We are compliant with our other statutory obligations and licence conditions	Number of compliance breaches	Reputational	Zero	Zero	No financial incentive			
SUSTAINABILITY OUTCOMES								
Our assets are capable of delivering outcomes in the future	Below ground asset performance assessment	Reputational & Financial	Stable assessment	Stable assessment	2.3	0.0	0%	100%
	Above ground asset performance assessment	Reputational & Financial	Stable assessment	Stable assessment	2.3	0.0	0%	100%
	Number of sites at risk of flooding	Reputational	55 sites	Zero sites	No financial incentive			
We will reduce our impact on the environment	Carbon emissions per customer per year	Reputational	39.4 kg	38.7 kg	No financial incentive			
	Monitor our abstraction at low flows at environmentally sensitive sites	Reputational	To be defined when robust data is available		No financial incentive			
We will be a financially responsible Company providing reasonable returns to our investors	Investors consider the risk and return to be adequate	Reputational	Adequate risk and return	Adequate risk and return	No financial incentive			
	Shareholders consider their reputations is maintained	Reputational	Reputation maintained	Reputation maintained	No financial incentive			
TOTAL					17.2	7.1		

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Section 1. Introduction

Since the last price review there have been a number of changes to the regulatory regime and the emphasis of business plans has also changed. These changes include: the emphasis of ownership of plans being with companies; business plans becoming more customer focused; separate price limits for retail services and wholesale services; and, a move towards outcomes rather than outputs. These are all changes that we welcome and believe are the right direction of travel for the industry.

Ofwat and others have expressed objectives that focus on a need to release companies from regulator focused outputs in a way that allows greater flexibility and creates the correct environment for innovation and ownership of the relationship with customers' and their priorities.

We have chosen to embrace the concept of outcomes and have designed outcomes that directly relate to the customers' views on the acceptability of the service they receive. This is a different approach compared to the historical method of measuring either activity or service failures and assuming that this activity delivers what is important to customers.

The real difference in the proposed approach is that it will allow us to use a wide ranging set of actions to improve customers' satisfaction, not just focusing on the traditional output but engaging with customers in a more effective way as well.

We believe this approach can bring a change in culture and improve our relationship with our customers, much like we have seen as a result of the introduction of the Service Incentive Mechanism.

We do however recognise that we also have statutory obligations to meet and we need to meet the needs of future customers too. For this reason we have also included outcomes that will ensure these obligations are also met.

This approach is new and innovative and therefore has a high degree of risk than more traditional approaches, for this price review a combined approach of performance measures based on customer satisfaction and output measures is proposed as a transition.

From 2020, when we will have a better understanding of how this approach works in practice, we envisage a move towards placing even greater emphasis on customer satisfaction and less emphasis on output measurement.

Section 2. Outcomes

We have chosen to embrace the concept of outcomes and have designed outcomes that directly relate to the customers' views on the acceptability of the service they receive.

The outcomes we proposed have been developed from our extensive customer research programme and are directly linked to priorities our customers identified.

As well as our customer driven outcomes we recognise and acknowledge the importance of our statutory obligations and obligations to our other stakeholders and the environment and also to the long term sustainability of the service we provide, therefore we have also developed a suite of 'compliance' and 'sustainability' outcomes that will ensure we meet out statutory obligations and provide long term security of supply for customers, as shown in Figure 1.

Figure 1 Outcome categories

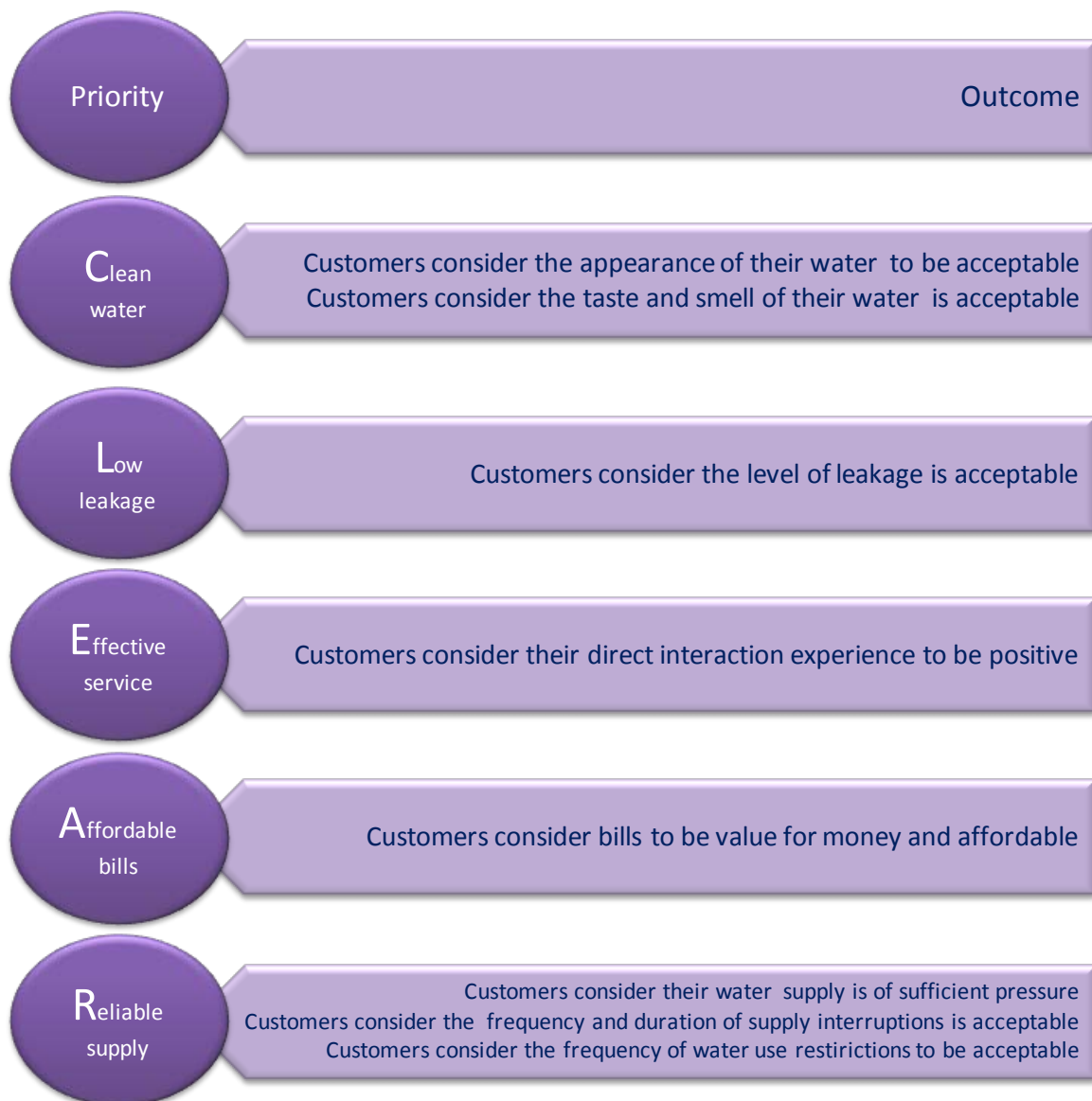


Customer Outcomes

In developing our business plan we have carried out an extensive programme of engagement with customers. The findings from this research identified the key priorities for our customers. Using these findings we have developed a set of outcomes that will ensure we deliver a service for customers that meets their expectations and is focused around their priorities.

Figure 2 sets out the priorities identified from our research programme and the customer outcomes we have developed and propose for the 2015-20 period.

Figure 2 Customer Outcomes



- Clean Water

Customers take the quality of their tap water for granted and expect a clean water supply which is odourless and tasteless. We have set ourselves two outcomes to deliver against, one focused on the appearance of water and the other on the taste and odour of water.

- Leakage

Our customers believe the current level of leakage is too high and is a waste of a valuable resource; it's a problem that we need to fix, and certainly before we ask them to conserve water when there are shortages. Leakage is an issue that impacts on our relationship with our customers and their views on the service we provide. Meeting a regulatory target has been the only measure of performance on leakage in the past and this is no longer enough. Customer satisfaction with leakage is key to providing credibility in the wider work we do.

- **Effective Service**

Customers are, in general, happy with how we operate our business in terms of opening hours, response times, and the availability of emergency contacts. Nevertheless, the key word for customers is choice; our customers expect to be able to choose how and when they will do business with us. They also expect to get regular information from us, particularly around water efficiency advice and how to reduce consumption, while they expect to be kept directly informed on issues around the quality or reliability of their tap water.

- **Affordable Bills**

A clear priority for the majority of customers is low, affordable bills. The cost of water bills is a factor that has repeatedly been raised in our customer research findings and large bill increases are a concern for customers. However, they have said that where future investment is needed to meet their expectations, it should be immediately targeted to critical areas that they consider are a priority.

- **Reliable Supply**

Many customers take the reliability of their tap water for granted. They believe we should be able to meet their demands for water, now and in the future, whatever the impact of external pressures, such as climate change and population growth. Customers have told us that saving water and developing new supplies are equally important, and that both should be in place to ensure there are sufficient supplies in the future.

Compliance Outcomes

As well as our customer driven outcomes we recognise and acknowledge the importance of our statutory obligations and obligations to our other stakeholders and the environment. We have therefore developed a suite of 'compliance outcomes' that will ensure, whilst striving to improve customer satisfaction that we continue to meet our statutory obligations. These outcomes are outlined in Figure 3.

Figure 3 Compliance outcomes



- We are compliant with water quality regulations

Our job is to ensure we deliver the highest quality drinking water to our customers every day. We operate within one of the strictest systems of regulation in the world and are closely monitored by the Drinking Water Inspectorate (DWI). Our customers trust that the water they receive is safe to drink, by ensuring compliance with our water quality regulations we will ensure this trust is not lost.

- We are compliant with environmental obligations

The Environment Agency regulates our environmental obligations through abstraction and discharge licences and through the reporting of water pollution incidents. We strive to ensure that our operations are carried out in a sustainable way and that we comply in full with our licences. We will work with the Environment Agency to undertake the requirements of the National Environment Programme and will ensure our obligations under this programme are met.

- We are compliant with health and safety regulations

We are committed to maintaining a safe and healthy working environment for our staff, and for anyone who may be affected by our business. We provide visible health and safety at all levels in the organisation, driven by positive and proactive actions that ensure the health and wellbeing of all our people, stakeholders and customers. This commitment is supported by compliance with our legal obligations under the Health and Safety at Work Act 1974.

- We are compliant with National Security obligations

It is a requirement under the Security and Emergency Measures Direction (SEMD) that we comply in full with all Advice Notes and Standards for Security of Operational Assets as issued by the Department for Environment Food and Rural Affairs.

- We are compliant with other statutory obligations and licence conditions

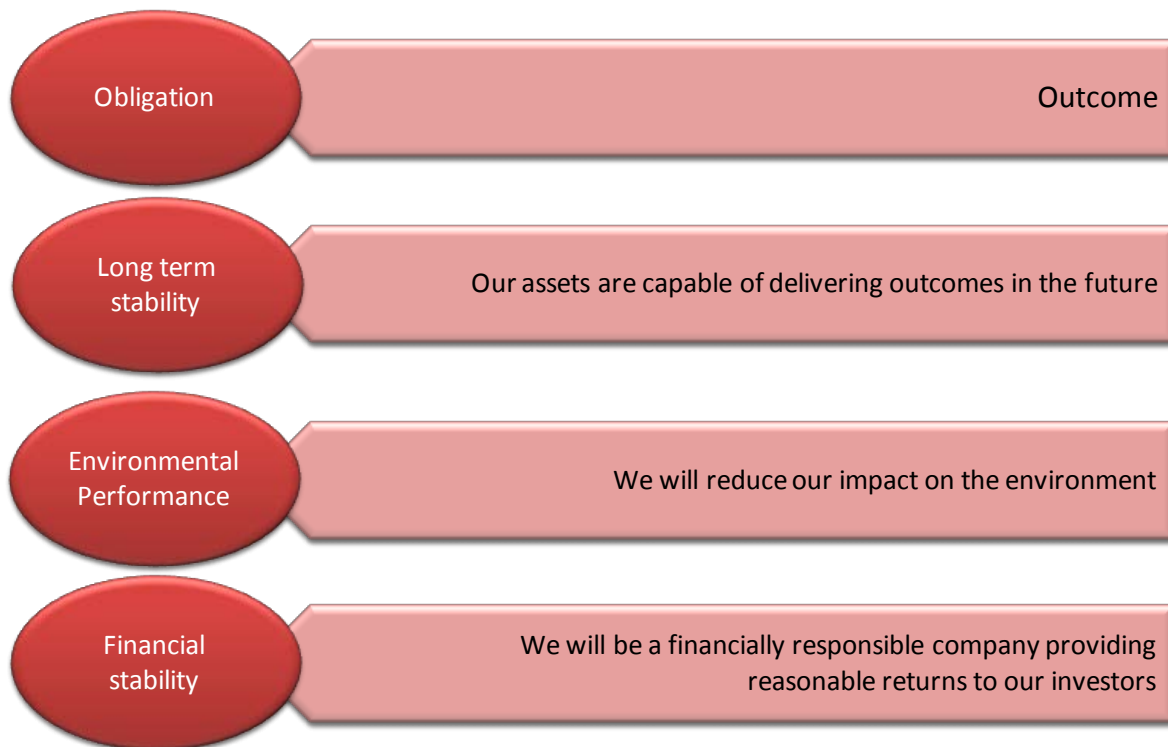
We need to ensure we remain compliant with all legal and other obligations, including those around regulatory processes and financial probity; and that in doing so, there is confidence in our overall performance.

Sustainability Outcomes

As well as our customer and compliance driven outcomes we have developed a set of outcomes that ensure the long term sustainability of service to customers, the environment and our business. One challenge we received relating to the customer satisfaction focused approach was that we may become short term focused and expend considerable resource in communicating performance, help and advice to maintain satisfaction whilst failing to invest in our assets for the longer term. Our response to this challenge is two-fold, firstly we are committed to use these outcomes over the longer term as under investment now will inevitable cause dissatisfaction in the future. Secondly, we have included some more traditional measures of investment particularly in relation to serviceability to provide reassurance that this long term investment focus is maintained.

The sustainability outcomes are outline in Figure 4.

Figure 4 Sustainability outcomes



- We will invest in our assets to protect the service for the future

Our customers have said they expect us to be able to meet their demands for water now and in the future, they also support the delivery of our activities against current and expected levels of service around water quality compliance and reliability of supplies; they do not expect deterioration in either the quality of the product we provide, or the service that it goes hand-in-hand with. We must ensure we provide reliable supplies for not only our current customers, but also our future customers. Maintaining our infrastructure, both above and below ground, is pivotal in meeting this expectation.

- We will reduce our impact on the environment

As a water supplier, we are more intrinsically linked to the environment than many other businesses. Water is also very heavy so requires a lot of energy to abstract it, treat it and pump it to customers' properties. We want to ensure the long-term sustainability of our business by ensuring our operations minimise any environmental impact. There are two key ways in which this can be achieved: By reducing the harm and damage that our carbon emissions have on the environment; and, by monitoring our abstractions at low flows at environmentally sensitive sites.

- We will be a financially responsible company providing reasonable returns to our investors

In order to fund our investment programmes in 2015-20, we must attract funding from competitive financial markets. There is no obligation for investors to invest in water companies, so we must be able to provide a return that is similar to other investment opportunities, and ensure those returns are in line with the risks of long-term investment. Our shareholders take risks investing in the business, and we must ensure a fair level of returns is provided to reflect this. However we must balance the needs of our shareholders with the needs of our customers, to keep bills low and affordable.

Section 3. Performance Measures and Commitments

As described above, the real difference in the proposed approach is that it will allow us to use a wide ranging set of actions to improve customers' satisfaction, not just focusing on the traditional output but engaging with customers in a more effective way as well. With this in mind we have developed a set of performance measures for each outcome that will measure and track customers' satisfaction, through the use of surveying, plus we propose further performance measures that represent more traditional output measures. Table 2 sets out the performance measures, both satisfaction and output measures, associated with each outcome.

Table 2 Outcome Performance Measures

Outcome	Performance Measure	
	Customer Satisfaction	Output metric
Customer Outcomes		
Customers consider the appearance of their water to be acceptable	✓	
Customers consider the taste and odour of their water to be acceptable	✓	
Customers consider the level of leakage to be acceptable	✓	Leakage target (annual)
Customers consider their direct interaction experience to be positive	✓	Service Incentive Mechanism
Customers consider bills to be value for money and affordable	✓	
Customers consider their water supply is of sufficient pressure	✓	Number of properties at risk of low pressure
Customers consider the frequency and duration of supply interruptions is acceptable	✓	Average time lost per property
Customers consider the frequency of water use restrictions to be acceptable	✓	Sufficient water to meet demand at all times – measured by Security of Supply Index
Compliance Outcomes		
We are compliant with water quality regulations		Mean Zonal Compliance
We are compliant with environmental obligations		Number of breaches of abstraction licences, discharge consents and environmental permits Number of pollution incidents
We are compliant with health and safety regulations		Number of compliance breaches of legislation
We are compliance with National Security obligations		Number of compliance breaches of legislation
We are compliant with other statutory obligations and licence conditions		Number of compliance breaches of legislation
Sustainability Outcomes		
We will invest in our assets to protect the service for the future		Below ground asset performance assessment Below ground asset performance assessment Number of sites at risk of flooding
We will reduce our impact on the environment		Carbon emissions per customer Monitoring our abstraction at low flows at environmentally sensitive sites
We will be a financially responsible company providing reasonable returns to our investors		Investors consider the risk and return to be adequate – survey Shareholders consider their reputation is maintained - survey

Customers Outcomes

The performance of all of our customer outcomes will be measured on a customer satisfaction survey. To set the baseline customer satisfaction score we commissioned a piece of new research to test customers' satisfaction with service on a scale of 1-5. Full details of this piece of research are set out in Appendix titled 'Engagement'. The research has identified the current level of satisfaction with each of the service outcomes, referred to as our baseline performance and set out in Table 3.

As our outcomes directly relate to the customers' views on satisfaction with the service they receive, the responsibility for these outcomes will primarily be with the retailer. However a dominant factor in satisfaction is the actual service customers' experience. Therefore, when designing the performance commitments and incentive package and appropriate share of the incentive between retail and wholesale, we have taken this into account. Within our outcomes research we tested the impact on satisfaction of a service failure and this is described further in Section 4.

This form of outcome performance measurement is comparable to the existing Service Incentive Mechanism (SIM). The difference between the two approaches will be that SIM measures satisfaction with customers who have contacted us and our performance measures will survey all customers.

As described above, the research provided a baseline customer satisfaction score out of 5. As you can see from Table 3, all but one measure has a score above 4, meaning customers are between satisfied and very satisfied. Therefore for our performance commitment we have set a target to maintain this high level of satisfaction throughout 2015-20.

For our leakage measure, where our current baseline shows customers are less than satisfied with a score of 3.6 out of 5, we are committing to achieve an average score of 4 by 2019-20, meaning customers are satisfied. This represents a half-way point between the current performance and the overall score for all areas of service. We are committing to achieving a satisfaction score in leakage of 4.3 by 2025.

Table 3 sets out the proposed performance commitments with regards to customer satisfaction score and output measures.

Table 3 Customer Outcomes Performance Commitments

Outcome	Performance Measure	Incentive Proposed	Current Performance Baseline	Performance Commitment 2019-20	Financial Incentive £m Revenue over 2015-20		Incentive Weighting		
					Penalty	Reward	Retail	Wholesale	
CUSTOMER OUTCOMES									
Customers consider the appearance of their water to be acceptable	Customer Satisfaction Score (out of 5)	Reputational & Financial	4.6	4.6	0.3	0.1	10%	90%	
Customers consider the taste and odour of their water to be acceptable	Customer Satisfaction Score (out of 5)	Reputational & Financial	4.3	4.3	0.3	0.4	10%	90%	
Customers consider the level of leakage to be acceptable	Customer Satisfaction Score (out of 5)	Reputational & Financial	3.6	4.0	0.3	0.9	30%	70%	
	Regulatory leakage target	Reputational	93.2 (Target 94 MI/d)	88.1 MI/d	No financial incentive				
Customers consider their direct interaction experience to be positive	Customer Satisfaction Score (out of 5)	Reputational & Financial	4.5	4.5	0.3	0.1	80%	20%	
	Service Incentive mechanism	Reputational & Financially incentivised via existing mechanism	72.7	> 80	10.2	5.1	60%	40%	
Customers consider bills to be value for money and affordable	Customer Satisfaction (%)	Reputational	72%	> 80%	No financial incentive				
Customers consider their water supply is of sufficient pressure	Customer Satisfaction Score (out of 5)	Reputational & Financial	4.5	4.5	0.3	0.2	10%	90%	
	Number of properties at risk of low pressure	Reputational	62	60 properties	No financial incentive				
Customers consider the frequency and duration of supply interruptions is acceptable	Customer Satisfaction Score (out of 5)	Reputational & Financial	4.7	4.7	0.3	0.0	10%	90%	
	Average time lost per property	Reputational	13 minutes	< 13 minutes	No financial incentive				
Customers consider the frequency of water use restrictions to be acceptable	Customer Satisfaction Score (out of 5)	Reputational & Financial	4.1	4.1	0.3	0.4	10%	90%	
	Meeting demand for water (Measured by Security of Supply Index)	Reputational & Financial	100	100	0.2	0.0	0%	100%	

As we have stated above, given the infancy and risk of this approach we have also included more traditional measures of performance. All but two of our customer outcomes also have traditional output performance measures. We have not applied an output measure to our water quality outcomes as these are also supported by the traditional compliance measures. In the absence of an appropriate output measure for 'Customers consider bills to be value for money and affordable' we will only measure this outcome based on customer satisfaction from our annual tracker surveys.

Compliance Outcomes

Our compliance outcomes are linked to our statutory obligations and obligations to our other stakeholders and the environment. Therefore, these outcomes will be measured by more traditional metrics as outlined in Table 4.

Our baseline performance against our statutory obligations is strong and our commitment to meeting these outcomes is absolute. Therefore our performance commitment across all compliance measure is to be 100% compliant or zero breaches.

Table 4 Compliance Outcomes Performance Commitment

Outcome	Performance Measure	Current Performance Baseline	Performance Commitment 2019-20
COMPLIANCE OUTCOMES			
We are compliant with water quality regulations	% Mean zonal compliance	99.96%	100%
We are compliant with environmental obligations	Number of breaches of abstraction licences, discharge consents and environmental permits	Zero	Zero
	Number of pollution incidents (Cat 1-2)	Zero	Zero
We are compliant with National Security obligations	Number of compliance breaches	Zero	Zero
We are compliant with health and safety regulations	Number of compliance breaches of legislation	Zero	Zero
We are compliant with our other statutory obligations and licence conditions	Number of compliance breaches	Zero	Zero

Sustainability Outcomes

Our sustainability outcomes are designed to ensure long term stability in the service we provide our future customers. Therefore these outcomes will also be measured by more traditional metrics as outlined in Table 5.

Our asset performance assessment measures will ensure our assets are capable of delivering the outcomes in the future and that future customers will receive at least the same level of service as current customers. Therefore our commitment in this area is stable assessment and the investment proposed in this plan will enable us to achieve this.

In 2010 we commenced a programme of flood resilience and this is on target for completion in 2015. However, we currently have 55 sites deemed at risk of flooding, following revision to the Environment Agency flood risk assessments, outlined in a separate appendix titled 'Resilience'. This means any customer supplied from these sites is at risk of losing their water supply in the event of a flood. We propose in our plan to continue our flood resilience programme into 2015-20 and to reduce number of sites at risk to zero.

The customer research undertaken for this plan revealed that reducing our carbon footprint was a low priority for customers and there was no willingness to pay for us to reduce it beyond current expectations. However, we recognise the way we operate can have an impact on our carbon footprint and that water requires a lot of energy to abstract it, treat it and pump it to customers. We want to ensure the long term sustainability of our business by, at the very least, minimising our impact by reducing our carbon emission. Therefore we are committing to reducing our carbon emissions per customer per year by 1.8% by 2019-20.

We acknowledge the proposal to introduce a new incentive, the Abstraction Incentive Mechanism (AIM), and we are keen to include a measure around this in our outcomes package. However, with the absence of robust data at present there is not sufficient certainty to set defined commitments. We have however committed to monitoring our abstractions at low flows at environmentally sensitive sites and when robust data is available we will define a specific measure.

Table 5 Sustainability Outcomes Performance Commitment

Outcome	Performance Measure	Current Performance Baseline	Performance Commitment 2019-20
SUSTAINABILITY OUTCOMES			
Our assets are capable of delivering outcomes in the future	Below ground asset performance assessment	Stable assessment	Stable assessment
	Above ground asset performance assessment	Stable assessment	Stable assessment
	Number of sites at risk of flooding	55 sites	Zero sites
We will reduce our impact on the environment	Carbon emissions per customer per year	39.4 kg	38.7 kg
	Monitor our abstraction at low flows at environmentally sensitive sites	To be defined when robust data is available	
We will be a financially responsible Company providing reasonable returns to our investors	Investors consider the risk and return to be adequate	Adequate risk and return	Adequate risk and return
	Shareholders consider their reputations is maintained	Reputation maintained	Reputation maintained

Section 4. Outcome Delivery Incentives

We have embarked on an approach that drives incentive based on a change in the level of customer satisfaction. We believe this approach can bring a change in culture and improve our relationship with our customers, much like we have seen as a result of the introduction of the SIM. This has therefore been the starting point for the development of the incentive package within the business plan.

Designing the incentives was an important and challenging process and we followed the framework set out in the methodology for determining the appropriate incentive for each measure. With this in mind we set six objectives to guide us in this piece of work:

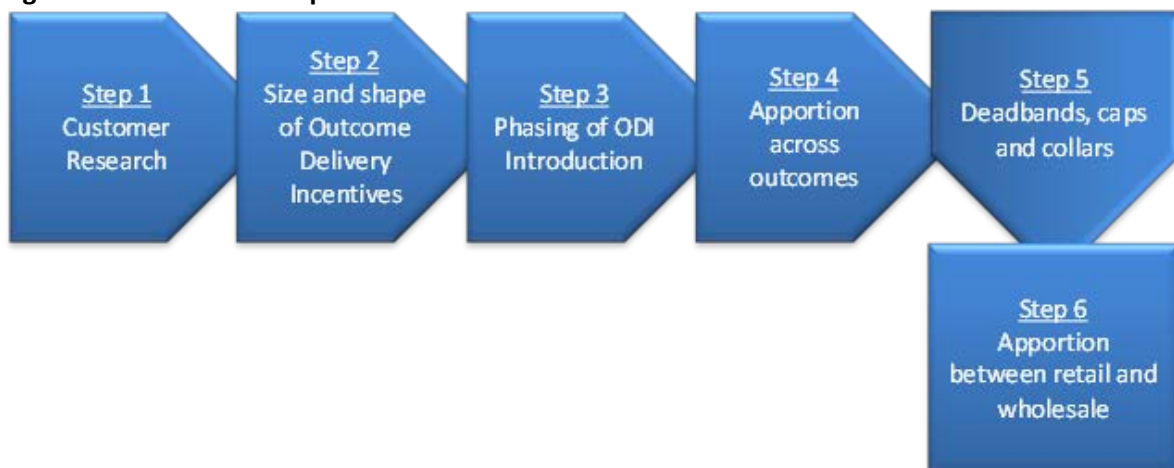
1. The incentives need to relate to customers' priorities;
2. The size and balance of the incentives need to reflect the value customers place on the outcome;
3. The size of the incentive needs to be sufficient to drive changes in our performance behaviour, but should not be so large as to cause a disproportionate risk to the returns we need to make to our investors;
4. The incentive size and phasing need to reflect the innovative nature of this approach;
5. The retailer and wholesaler should be share, proportionally, the incentive so it reflects the part each one plays in achieving the relevant outcome;
6. The incentives should contain a mix of satisfaction measures and more traditional targets to provide an appropriate performance balance.

All of our outcomes have reputational incentives associated with them as we believe this is a powerful incentive. Each year we will publish the latest performance compared to our commitments in the form of an outcomes dashboard. This will be published annually in our Annual Performance Report.

As our compliance outcomes are linked to our statutory obligations and obligations to our other stakeholders and the environment, many of them are already subject to financial penalty or prosecution for failure. Where this is the case we do not propose to include an outcome delivery incentive (ODI). However, where there are no existing financial incentive regimes in place we have proposed a financial ODI.

The overall process we have followed for determining our financial ODIs is outlined in Figure 5.

Figure 5 Incentive Development



Each of these steps are described in more detail below.

Step 1: Customer Research

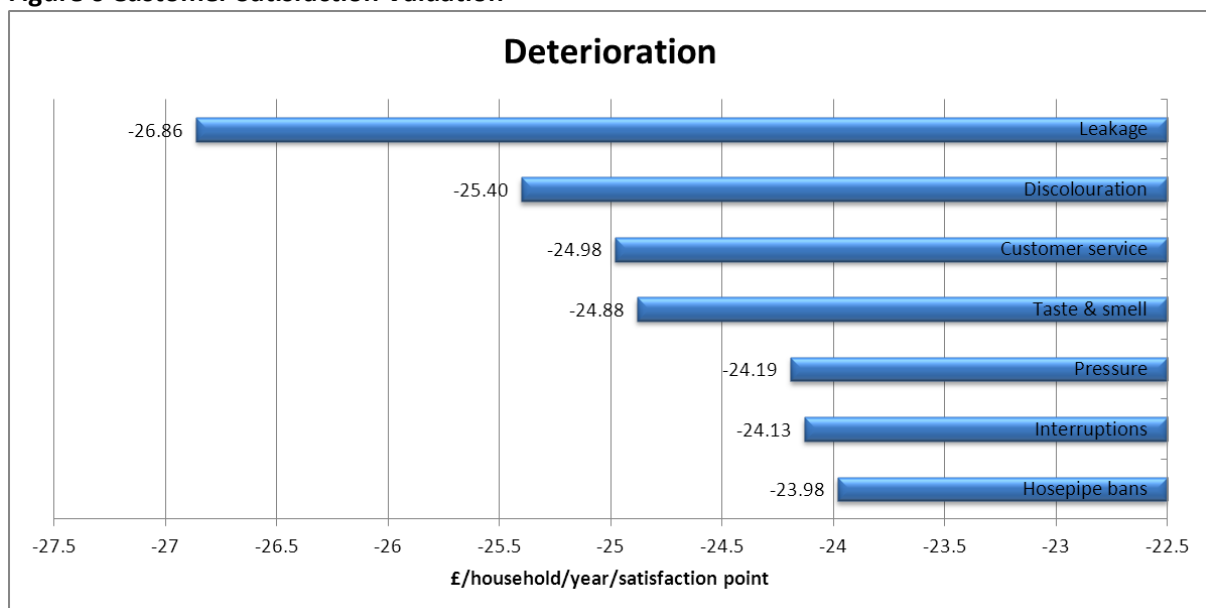
We support the principle that the incentive values should be reflective of the value customers place on the particular element of service. Whilst we have willingness to pay data for our more output focused measures, there is no existing data on the valuation of satisfaction. Therefore to establish an appropriate incentive value for these measures, we carried out a new and innovative piece of research, to test the value customers place on their own satisfaction, as detailed in a separate appendix on engagement.

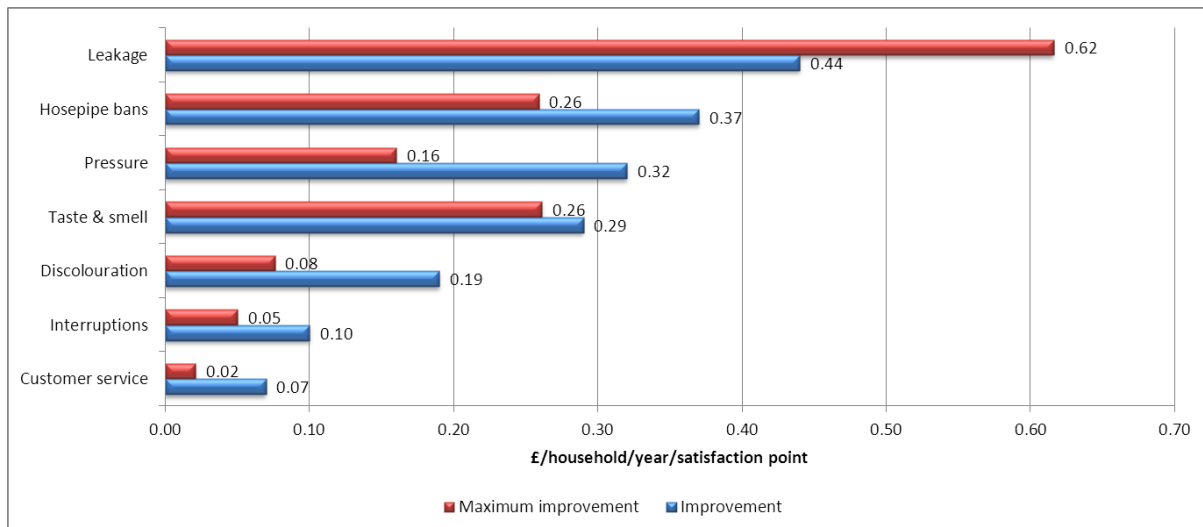
The research provided us with a willingness to accept (WTA) and willingness to pay (WTP) for a 1 point deterioration or improvement in satisfaction against each customer outcome. Figure 6 outlines the results. The overall WTP for a 1 point improvement in all measures was £1.79 per customer per year and WTA of -£174.41 per customer per year.

Customers were asked their WTP for a 1 point improvement in their satisfaction, however based on the current level of satisfaction a full 1 point improvement is not possible in all but 1 measure (due to the measure being above 4 already). Therefore for the purposes of calculating the maximum WTP, the WTP has been capped at the maximum possible improvement. For example customers current satisfaction with interruptions was 4.7 out of five, therefore the mathematical maximum possible improvement is +0.3. To calculate the maximum WTP we have taken 3/10ths of the WTP for a 1 point improvement. For our leakage outcome the maximum improvement is a +1.4 point change. The maximum improvement WTP is shown in Figure 6. The impact on the overall WTP is a reduction of £0.35 per customer per year, taking the overall WTP down to £1.44 per customer per year.

The WTA for a 1 point deterioration has not been capped as the current satisfaction score is above 1 for all outcomes.

Figure 6 Customer Satisfaction Valuation





However, our Customer Challenge Group (CCG) raised concerns about the statistical validity of the research results. The concerns are outlined in their report but in summary their concerns centred on the methodology of measuring satisfaction on a scale of 1 to 5 and customers being able to value a change in their satisfaction robustly.

These concerns are not surprising given that this type of research is in its infancy and unique according to our research partners, and we along with Accent, who carried out the research, shared our CCG's concerns. Given these concerns, we have not directly translated the above results on direct valuation into our ODIs.

These results are however to some degree consistent with the findings from our earlier research, in that they were not symmetrical around the existing service and satisfaction levels. The results showed a significantly larger WTA than WTP. Therefore we have used the results to shape our rewards and penalties and to proportionally split the total incentive package across outcomes.

Step 2: Size and Shape of ODIs

In the absence of statistically robust values from the outcomes research we commissioned Frontier Economics to carry out a piece of work to analyse possible incentives ranges using the Return on Regulatory Equity (RoRE) mechanism and demonstrate the overall risk reward balance is appropriate. The findings report from Frontier is shown in Section 9.

The RoRE analysis provides the upside and downside risk of a reasonable best and worst case scenario. The analysis assesses the symmetry and potential impact on returns to equity from the regulatory incentive package. The analysis includes the outcome delivery incentives, cost efficiency incentive and SIM. In addition to these incentive mechanisms, we are proposing to share debt outperformance with customers, this is not included in the RoRE analysis but should be considered in the context of interpreting the RoRE analysis.

The RoRE analysis confirms a maximum ODI of total downside -1.0% per annum and upside of +0.5% per annum, excluding SIM, represents an appropriate risk-reward balance. The balance between the upside and the downside is appropriate and the balance between the incentives is appropriate.

The revenue at risk, based on the 2012-13 revenue of £204m, is shown in Table 6. The package, including SIM, would therefore be -2.0% to +1.0% per annum or -£20.4m to +£10.2m over 2015-20.

Table 6 Maximum Incentive Package

	Penalty			Reward		
	p.a %	AMP		p.a %	AMP	
		%	Revenue		%	Revenue
Outcome Delivery Incentives	-1.0%	-5.0%	-£10.2m	+0.5%	+2.5%	+£5.1m
SIM	-1.0%	-5.0%	-£10.2m	+0.5%	+2.5%	+£5.1m
Total	-2.0%	-10.0%	-£20.4m	+1.0%	+5.0%	+£10.2m

The total ODI range is in effect double the current SIM range, a range that has been sufficient to drive a change in culture and behaviour in terms of customer service. This package provides sufficient incentive for us to perform and deliver the commitments proposed whilst ensuring financeability is maintained.

In addition to the financial incentives, all of our outcomes have reputational incentives associated with them. Each year we will publish the latest customer satisfaction score and provide an on-going comparison to baseline.

Step 3: Phasing of ODIs

Given the risks identified with this new approach we propose a phased introduction of the ODI on our satisfactions measures.

We believe there are four options in this respect:

1. All measures incentivised every year;
2. Satisfaction measures incentivised 100% from year 3;
3. Satisfaction measures incentivised from year 3 on a phased basis; and,
4. Total incentive package maintained with phased satisfaction measures i.e. reducing penalty on hard measures.

The implication of these options on the overall ODI package is shown in Table 7 and Table 8.

Table 7 ODI Penalty Phasing options

	Year 1 £m	Year 2 £m	Year 3 £m	Year 4 £m	Year 5 £m	Total £m
Option 1 – All measures incentivised every year						
Satisfaction measures	1.075	1.075	1.075	1.075	1.075	5.375
Output measures	0.965	0.965	0.965	0.965	0.965	4.825
Total	2.040	2.040	2.040	2.040	2.040	10.200
% per annum	1.00%	1.00%	1.00%	1.00%	1.00%	5.00%
Option 2 – Soft measures incentivised 100% from year 3						
Satisfaction measures			1.075	1.075	1.075	3.225
Output measures	0.965	0.965	0.965	0.965	0.965	4.825
Total	0.965	0.965	2.040	2.040	2.040	8.050
% per annum	0.47%	0.47%	1.0%	1.0%	1.0%	3.95%
Option 3 – Soft measures incentivised from year 3 on a phased basis						
Satisfaction measures			0.358	0.717	1.075	2.150
Output measures	0.965	0.965	0.965	0.965	0.965	4.825
Total	0.965	0.965	1.323	1.682	2.040	6.975
% per annum	0.47%	0.47%	0.65%	0.82%	1.00%	3.42%

Option 4 – Total incentive package maintained with phased soft measures						
Satisfaction measures			0.358	0.717	1.075	2.150
Output measures	2.040	2.040	1.682	1.323	0.965	8.050
Total	2.040	2.040	2.040	2.040	2.040	10.200
% per annum	1.00%	1.00%	1.00%	1.00%	1.00%	5.00%

Table 8 ODI Revenue Phasing Options

	Year 1 £m	Year 2 £m	Year 3 £m	Year 4 £m	Year 5 £m	Total £m
Option 1 – All measures incentivised every year						
Satisfaction measures	1.020	1.020	1.020	1.020	1.020	5.100
% per annum	0.50%	0.50%	0.50%	0.50%	0.50%	2.50%
Option 2 – Soft measures incentivised 100% from year 3						
Satisfaction measures			1.020	1.020	1.020	3.060
% per annum			0.50%	0.50%	0.50%	1.50%
Option 3 – Soft measures incentivised from year 3 on a phased basis						
Satisfaction measures			0.340	0.680	1.020	2.040
% per annum			0.17%	0.33%	0.50%	1.00%

Based on our risk assessment, we have adopted option 3 in our ODI package. Excluding SIM, this reduces the maximum ODI penalty to £7.0m and maximum ODI reward to £2.0m.

Step 4: Apportion ODIs by Outcome

As described earlier, in addition to the financial incentives on our customer satisfaction measures we have also included a financial incentive on the following output focused performance measures:

- Meeting demand for water;
- Below ground asset performance assessment; and,
- Above ground asset performance assessment.

These are the only output measures we have included a financial incentive on because of the wide spread impact and implications of asset performance.

WTP by any method is difficult to robustly achieve for this type of measure as they cannot be easily translated into services customers experience so in the absence of specific WTP values for each of these measures we have assumed these metrics to have an equal weighting to the satisfaction measures.

In our main stage WTP research we did however test the WTP and WTA for a change in hosepipe ban level of service. This is the most sensible valuation for adoption against our 'meeting demand for water' measure. The WTA for deterioration in this area is -£7.55 per customer per year if service deteriorates from 1 in 10 years to 1 in 5.

In the absence of a direct valuation for ensuring long term asset performance, we have used the current value customers place on achieving satisfaction as a proxy for the value they place on these services in the future, we have generated this by summing the satisfaction valuations i.e. the assumption is that they place the same value on these services in the future as they do today. For determining a WTA for these two metrics we have used the total of: water quality improvements; reliable supplies; and, lower leakage. Therefore for these two measures the combination of relevant satisfaction valuations has been adopted as a proxy.

We have assumed no WTP for these output focused measures on the basis that we are funded to maintain current levels of service and there is insufficient WTP for a change in service.

The resulting ODIs by outcome are shown in Table 9.

Table 9 Customer Outcome Delivery Incentives

Outcome	Performance Measure	Incentive Proposed	Current Performance Baseline	Performance Commitment 2019-20	Financial Incentive £m Revenue over 2015-20		Incentive Weighting		
					Penalty	Reward	Retail	Wholesale	
CUSTOMER OUTCOMES									
Customers consider the appearance of their water to be acceptable	Customer Satisfaction Score (out of 5)	Reputational & Financial	4.6	4.6	0.3	0.1	10%	90%	
Customers consider the taste and odour of their water to be acceptable	Customer Satisfaction Score (out of 5)	Reputational & Financial	4.3	4.3	0.3	0.4	10%	90%	
Customers consider the level of leakage to be acceptable	Customer Satisfaction Score (out of 5)	Reputational & Financial	3.6	4.0	0.3	0.9	30%	70%	
	Regulatory leakage target	Reputational	93.2 (Target 94 MI/d)	88.1 MI/d	No financial incentive				
Customers consider their direct interaction experience to be positive	Customer Satisfaction Score (out of 5)	Reputational & Financial	4.5	4.5	0.3	0.1	80%	20%	
	Service Incentive mechanism	Reputational & Financially incentivised via existing mechanism	72.7	> 80	10.2	5.1	60%	40%	
Customers consider bills to be value for money and affordable	Customer Satisfaction (%)	Reputational	72%	> 80%	No financial incentive				
Customers consider their water supply is of sufficient pressure	Customer Satisfaction Score (out of 5)	Reputational & Financial	4.5	4.5	0.3	0.2	10%	90%	
	Number of properties at risk of low pressure	Reputational	62	60 properties	No financial incentive				
Customers consider the frequency and duration of supply interruptions is acceptable	Customer Satisfaction Score (out of 5)	Reputational & Financial	4.7	4.7	0.3	0.0	10%	90%	
	Average time lost per property	Reputational	13 minutes	< 13 minutes	No financial incentive				
Customers consider the frequency of water use restrictions to be acceptable	Customer Satisfaction Score (out of 5)	Reputational & Financial	4.1	4.1	0.3	0.4	10%	90%	
	Meeting demand for water (Measured by Security of Supply Index)	Reputational & Financial	100	100	0.2	0.0	0%	100%	
COMPLIANCE OUTCOMES									
We are compliant with water quality regulations	% Mean zonal compliance	Reputational	99.96%	100%	No financial incentive				
We are compliant with environmental obligations	Number of breaches of abstraction licences, discharge consents and environmental permits	Reputational	Zero	Zero	No financial incentive				
	Number of pollution incidents (Cat 1-2)	Reputational	Zero	Zero	No financial incentive				
We are compliant with National Security obligations	Number of compliance breaches	Reputational	Zero	Zero	No financial incentive				
We are compliant with health and safety regulations	Number of compliance breaches of legislation	Reputational	Zero	Zero	No financial incentive				
We are compliant with our other statutory obligations and licence conditions	Number of compliance breaches	Reputational	Zero	Zero	No financial incentive				
SUSTAINABILITY OUTCOMES									
Our assets are capable of delivering outcomes in the future	Below ground asset performance assessment	Reputational & Financial	Stable assessment	Stable assessment	2.3	0.0	0%	100%	
	Above ground asset performance assessment	Reputational & Financial	Stable assessment	Stable assessment	2.3	0.0	0%	100%	
	Number of sites at risk of flooding	Reputational	55 sites	Zero sites	No financial incentive				
We will reduce our impact on the environment	Carbon emissions per customer per year	Reputational	39.4 kg	38.7 kg	No financial incentive				
	Monitor our abstraction at low flows at environmentally sensitive sites	Reputational	To be defined when robust data is available		No financial incentive				
We will be a financially responsible Company providing reasonable returns to our investors	Investors consider the risk and return to be adequate	Reputational	Adequate risk and return	Adequate risk and return	No financial incentive				
	Shareholders consider their reputations is maintained	Reputational	Reputation maintained	Reputation maintained	No financial incentive				
TOTAL					17.2	7.1			

Step 5: Deadband, Reward Cap and Penalty Collar

Given the approach to satisfaction is new, there is a degree of uncertainty in measuring actual

delivery of the performance commitments. Therefore we have applied deadbands to these measures.

The statistical results from the outcomes research give a deadband of +/- 0.1 point of satisfaction, based on the 95 percentile of results. This has been applied for each satisfaction performance commitment. Therefore the incentive will activate when performance is +/- 0.2 points from the commitment.

For our asset performance assessment measures, we propose the deadband is two 'marginal' or worse assessments. The incentive would not apply until we report a third marginal assessment, or the incentive will be applied if three out of five years in the period are assessed as marginal.

For our meeting demand measure, as measured by the security of supply index (SOSI), we have applied a deadband of 1 point of SOSI, therefore if SOSI is less than 99, the incentive will apply.

The reward cap and penalty collars are set out in data table W2 and R2. We are not proposing a gradient in the application of incentives against performance. By this we mean as soon as performance is not delivered i.e. if performance is outside the deadband, the full incentive applies. An example is shown in Table 10. Therefore a performance score of 5 out of 5 would be our reward cap and the penalty collar would be a full 1 point deterioration from baseline.

Table 10 Example of ODI caps and collars

	Baseline	Deadband	Performance	Performance
Satisfaction performance measure	4.6	4.5 to 4.7	< 4.5	> 4.7
Incentive applied	-	None applied	Full penalty applied	Full reward applied

Step 6: Allocation between retail and wholesale

As described in Section 4, within the business plan we have created a mechanism to share the incentive package between retail and wholesale.

Within our outcomes research we tested with customers if they had a different satisfaction score, based on their direct and indirect experience of a failure of our service. The objective of this was to establish the value of direct experience which would then be wholly attributable to the wholesale plan. The theory was that direct experience of a service failure e.g. for interruptions would produce a lower satisfaction score when compared to customers who had not had such an experience. The difference was solely attributable to the failure and therefore caused by the wholesaler. This would allow us therefore to attribute cause and effect and assign responsibility between the wholesaler and the retailer for a change in satisfaction.

The research showed there was a much lower level of satisfaction for those customers who had experienced a particular failure in aspects of our service, for example, a temporary interruption to their water supply, to those who had not, confirming the clear correlation between actual performance and customer satisfaction.

However, given the concerns of the statistical validity of the research results described above, we have not directly translated these results into our weightings between retail and wholesale.

Instead we have carried out a management exercise to determine the appropriate share of incentive between retail and wholesale, based on management expectations of responsibility and contribution

to delivery. In future years our on-going research will inevitably reveal the correlation between performance and satisfaction and we will build these results into future incentive sharing approaches.

The overall incentive package for the retail and wholesale plan is shown in Table 11.

Table 11 Overall Incentive Package

Outcome	Retail		Wholesale		Total	
	Penalty £m	Reward £m	Penalty £m	Reward £m	Penalty £m	Reward £m
Customer outcomes	6.6	3.5	6.0	3.7	12.6	7.1
Compliance outcomes	0.0	0.0	0.0	0.0	0.0	0.0
Sustainability outcomes	0.0	0.0	4.6	0.0	4.6	0.0
Total	6.6	3.5	10.6	3.7	17.2	7.1
	38.5%	48.9%	61.5%	51.1%	100.0%	100.0%

We believe the overall package is balanced between retail and wholesale and reflects their contributions to the delivery of our outcomes.

The retail incentive share will be shared between household and non-household, based on the criteria set out in our non-household customer business plan. Whilst we recognise that Ofwat have stated that they do not expect ODIs to be applied to non-household customers we believe they should be offered the benefits up until the market opens effectively and we have detailed this approach in the non-household customer business plan.

Section 5. Performance Tracking and Frequency of Adjustments

As stated above we will publish our performance against these outcomes and performance commitments, in the design of the outcomes dashboard, annually in our Annual Performance Report. Although we will publish and track performance annually we propose to apply the ODIs at the end of the period, as a legacy adjustment in our 2020-25 business plan. Our customers have told us stable bills are important to them, so to prevent annual increases and decreases depending on performance, we will carry out one adjustment at the 2019 Periodic Review.

At the time of preparing our next business plan we will have actual data for the first three years of the period and a forecast for the final two years, therefore we will include a forecast adjustment in the business plan with a reconciliation of actual performance during the period.

To develop our performance commitments and ODIs we carried out research into customers' current satisfaction. This has enabled us to set a baseline level of satisfaction with each measure. From 2014-15 we will be carrying out a similar tracker survey to monitor our performance and customers' satisfaction. With exogenous impacts on customer satisfaction and potential seasonal variation, e.g. potential impact from main billing period, we will carry out the surveys continuously and take an average for the year.

We will consult with our new customer panel to agree the design and scope of the quarterly tracker surveys and any possible amendments that may be required, once this approach is established and we can regularly assess how it is performing.

Section 6. Risk

The approach described above is a bold move that is not without risks.

There are many external factors, such as impacts of extreme weather on water supplies, or political and media comment about the water industry, that can influence and change customers' views and, ultimately, their level of satisfaction. However, we are prepared to take this risk, as we firmly believe this approach is the right one for customers. We are prepared to challenge ourselves to manage these risks better, we will be motivated to ensure customers are properly informed and also that our performance is as they expect it to be.

We know our stakeholders, including our CCG, share our concerns of the risks with an approach based on satisfaction. However the risk is being borne by us and customers are being protected in the form of our more traditional measures and our compliance and sustainability outcomes. These will ensure service is maintained now and in the future.

Section 7. Data Table Commentary

The outcomes, performance measures, performance commitments and incentives included in this appendix have been reported in the following data tables:

- W1 Outcomes, performance measures and expenditure
- W2 Outcome delivery incentives for wholesale water
- R1 Outcomes, performance measures and associated expenditure
- R2 Outcome delivery incentives for retail

With the exception of our leakage target, for R1 and W1 there is no incremental cost associated with the performance commitments. All commitments are being delivered through the baseline operating costs and investment.

For our leakage target, which is forecast to reduce from 93 MI/d in 2014-15 to 88.1 MI/d in 2019-20, we have included the incremental cost of this leakage reduction. The incremental cost is as reported within our Water Resources Management Plan, see separate supporting appendix.

Section 8. Conclusions

We believe our overall package of outcomes, measures and incentives represents a good balance of outcomes for customers, the environment, the Company and stakeholders.

- Our outcomes are **directly linked to customer priorities**, compliance with statutory obligations or long term sustainability of our business;
- Outcomes and performance commitments have been designed to relate **directly to customer satisfaction** with our service, allowing us to use a wide ranging set of actions to improve our performance;
- Our range of outcomes will ensure we continue to **meet our statutory obligations and maintain services for future customers**. In response to the challenge that we may become short term focused by measuring satisfaction, we have developed a set of outcomes that ensure the long term sustainability of service to customers, the environment and our business. We are also committed to use these outcomes over the longer term, as under investment now will inevitable cause dissatisfaction in the future. **Our outcomes protect future customers**;
- Given the impact from external factors and the uncertainty of customer satisfaction, this approach poses **greater risk** for us compared to traditional measures of output delivery. We will manage this risk through continual review and to some extent have reflected this uncertainty in our ODI range;
- Our research showed there was a much lower level of satisfaction for those customers who had experienced a particular failure in aspects of our service, to those who had not, confirming the clear **correlation between actual performance and customer satisfaction**;
- Given the concerns around the statistical robustness of customer valuation of changes in satisfaction, we have used the results to shape our ODI penalty and reward, **customer WTP has shaped the ODIs**;
- The overall ODI package including SIM is, total downside risk of -2.0% of annual turnover and total upside reward of +1.0% of annual turnover. Or **-£20.4m to +£10.2m over 2015-20**. This range of incentive is sufficient to drive a change in culture and behaviour in terms of customer service and for us to perform and deliver the commitments proposed;
- Our ODIs have a **mix of reputational and financial incentives** more skewed towards financial incentives. All but three performance measures (carbon, abstraction monitoring and affordability) have direct or indirect financial incentives applied. We have done this in part to show our commitment to the new approach and to achieving our stated outcomes. All outcomes have a reputational incentive as each year of the period we will publish our performance against these commitments;
- All groups of outcomes and performance measures - customer, compliance and sustainability, have ODIs, meaning incentives apply to **wide ranging areas of service**;
- The ODIs are **balanced between retail and wholesale** and reflect their contributions to the delivery of our outcomes. The retail incentive will be shared between household and non-

household, as we believe non-household should be offered the same benefits up until the market opens effectively;

- The ODI size and range reflects a balance between the consequence of performance and the probability of delivery or failure i.e. the ODIs have a **realistic probability** of occurring;
- The size of the ODI package is supported by external analysis of RoRE and represents an **appropriate risk-reward balance**. The balance between the upside and the downside is appropriate and the balance between the incentives is appropriate. It should be noted that there are other considerable incentives in addition to the ODIs and SIM, for example prosecutions for compliance offences and reputational incentives that are excluded from this analysis but will if triggered also impact on the RoRE.

Section 9. Frontier Economics RoRE Analysis

A NOTE FOR SOUTH EAST WATER

Background and objective

Ofwat's final methodology asks companies to demonstrate that the overall risk reward balance is appropriate as assessed in a RoRE calculation. Ofwat does not provide any detailed guidance what an appropriate balance would look like. This note presents the results of the RoRE analysis for South East Water and demonstrates that the risk and reward balance is appropriate.

How RoRE is derived

RoRE stands for the Return on Regulatory Equity and captures the possible range of upside and downside returns arising from the regulatory methodology. RoRE is calculated as follows:

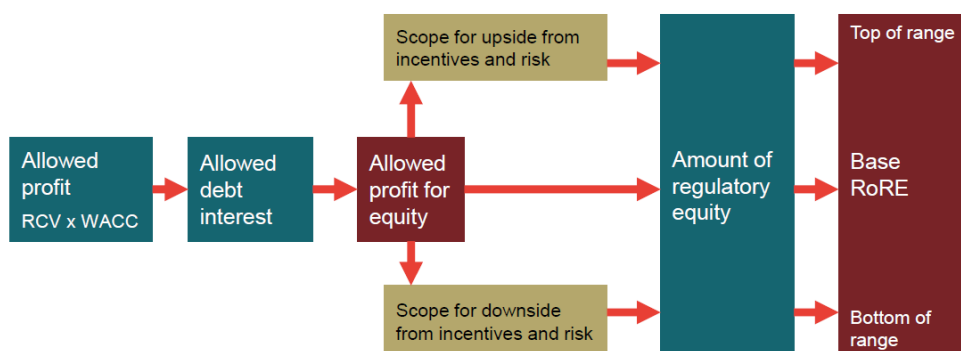
$$\text{RoRE} = \text{Regulatory profit after tax} - \text{Interest} / \text{RCV} - \text{Debt}$$

There are a number of different definitions of profit that could be used in the RoRE calculation. We consider a RoRE analysis based on regulatory profit to be most relevant for a comparison of risk and reward mechanisms across companies. This is because the emphasis is on the size and balance of the RoRE range that is influenced by the incentive mechanisms. As a starting point, we therefore use the traditional approach of allowed profit based on RCV and the cost of capital:

$$\text{Profit after tax} = \text{WACC} \times \text{RCV}$$

Figure 1 illustrates how the RoRE range is derived. For each incentive mechanism the best/worst case impact on profit is represented in the RoRE range.

Figure 1. How RoRE range is derived



There are a number of important limitations to RoRE:

- RoRE does not show return on equity in individual years – it includes impact of NPV adjustments at the end of the period so the range of impacts for individual years would be wider.
- RoRE is not intended to represent an absolute maximum or minimum return for investors. This

is because the correlation of different incentive outcomes is not taken into account and not all risks are included (e.g. political and regulatory risk).

- RoRE is most suited to a comparison of relative impact of incentives and risk – either between companies or from one period to the next.

How to assess the results

We have considered whether decisions by other UK regulators provide any further useful information with regard to how “appropriate risk reward balance” and “efficient pain and gain sharing” should be interpreted. For example, Ofgem uses RoRE to assess the calibration of the price control package. For the gas distribution price control, Ofgem has indicated that it would expect the RoRE range based on notional equity to be between double digit returns and at or below the cost of debt. Ofgem sought to ensure that there was a broadly symmetric overall upside and downside within the package, although not necessarily exactly symmetric. Within that, some incentives are symmetric, some are asymmetric, some are downside only, some are upside only. However, the large incentives appear to have been symmetric.

While the evidence from Ofgem is useful, it is likely that Ofwat would not require a symmetric approach but would prefer asymmetry to ensure strong incentives to deliver outcomes. As a result, we consider the following questions to be of relevance to demonstrate that the RoRE range is appropriate:

- Does the RoRE range look reasonable? Is the maximum too high/ minimum too low?
- Is the balance between the upside and downside reasonable?
- Is the balance between the different incentive types reasonable?

Inputs to the RoRE analysis

The RoRE analysis provides the upside and downside risk of a reasonable best and worst case scenario. The RoRE analysis includes the outcome delivery incentives, cost efficiency incentive and SIM and each of these is discussed in more detail below. In addition to these incentive mechanisms, South East Water is also proposing to share debt outperformance with customers. This is not included in the RoRE analysis but implies that South East Water is taking an asymmetric risk on the cost of debt. This should be considered in the context of interpreting the RoRE analysis.

Outcome Delivery Incentives

South East Water has developed its own outcome incentives. The penalties and rewards are linked to performance on different measures of success. The maximum penalty and reward on outcome incentives ranges from +0.5% of revenue to -1.0% of total revenue. These have been included in the analysis.

Cost efficiency incentive

Cost efficiency incentive – Wholesale expenditure will be subject to the cost efficiency incentive. This implies that any over- or underspend will be shared with customers at a rate determined by the menu choice. We envisage that the central menu choice will be around 50% with a range from 30 % to 70%. The RoRE analysis is based on a totex menu rate of 50% and totex over- underperformance of +/-7.5% in each year. The potential over- and underperformance reflects a number of risks such as cost inflation, unfavourable external conditions that require more expenditure to meet targets

and the potential difference between Ofwat’s baseline cost assessment and South East Water’s proposed costs.

SIM

In its final methodology Ofwat has indicated that the SIM will be used in PR14 but will be applied to retail revenue. As a result, it could be argued that the SIM should not be included in a wholesale RoRE assessment. However, there are strong links between the SIM performance and the wholesale performance. As a result, we have included in the SIM in the RoRE analysis. As Ofwat is currently consulting on the design for the SIM, there is some uncertainty around the SIM for 2015-20. In the absence of better information, we have used the 2010-15 SIM penalties and rewards which suggest a range of +0.5% of revenue to -1% of revenue.

Other financial data inputs

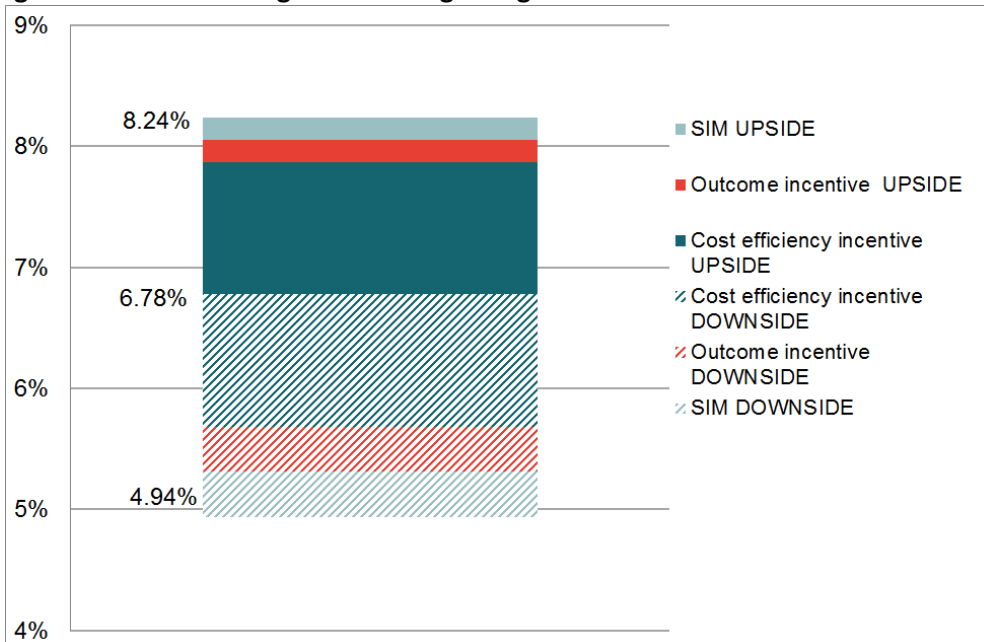
In addition to the inputs on the incentive mechanisms, the RoRE analysis reflects a real wholesale return on RCV of 4.45%, a notional gearing figure of 60% and a notional real cost of debt of 2.9%.

Results

Notional gearing

Figure 1 provides the results of the RoRE analysis for South East Water based on the assumptions provided in the previous section. The figure shows that the midpoint RoRE is 6.78% with an upside of 8.24% and a downside of 4.94%.

Figure 1. SEW RoRE range - Notional gearing



Source: Frontier calculations

We consider the RoRE range to represent an appropriate risk-reward balance as:

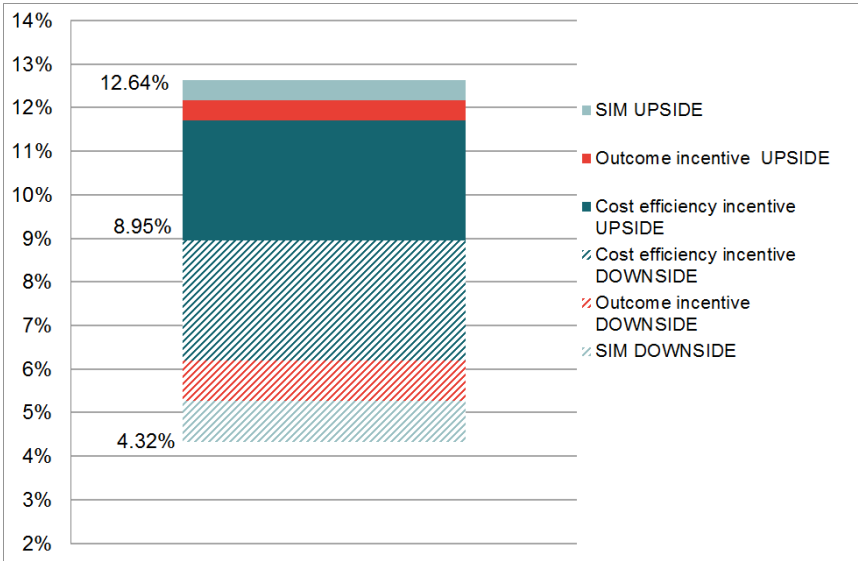
- The **overall RoRE range** is reasonable as it demonstrates that there is considerable variability between returns depending on South East Water's performance but at the same time the range is not so high that it creates undue risks.
- The **balance between the upside and the downside** is appropriate. The balance is asymmetric. The asymmetry is driven by both the outcome delivery incentives and the SIM. South East Water therefore faces higher maximum penalties than rewards for both incentive mechanisms which suggest that customers are protected from underperformance but outperformance rewards are limited. This demonstrates that South East Water is taking on more downside than upside risk. An asymmetric balance corresponds 1. with the SIM design as Ofwat created an asymmetric incentive for 2010-15 and 2. with customers' views on incentives. As the outcome delivery incentive system is new to customers, they are more supportive of penalties than rewards.
- The **balance between the incentives** is appropriate. The incentive mechanism that makes up the largest proportion of the range is the cost efficiency mechanism. Outcome delivery incentives and the SIM are of the same magnitude. This is considered reasonable as they are both closely linked to customers' perception of the service they receive. Even though the outcome delivery incentives cover more service dimensions than the SIM, the nature of South East Water's incentives implies that they are closely linked to customers' views which are not fully controllable. Outcome delivery incentives and SIM together and make up about one-third of the downside and a quarter of the upside risk. This is considered appropriate as the totex incentive applies to all wholesale costs whereas the SIM and outcome delivery incentives focus on specific aspects of the service level.

Overall, we therefore conclude that the South East Water's RoRE range demonstrates an appropriate risk and reward balance. As South East Water is proposing to share debt outperformance with customers in addition to the incentives reflected in the RoRE, the upside from debt outperformance has effectively been constrained by including this mechanism.

Actual gearing

Figure 2 shows the RoRE range for actual gearing. The mid-point of the range in this case is 8.95% with a downside of 4.32% and an upside of 12.64%.

Figure 2. SEW RoRE range - Actual gearing



Source: Frontier calculations

The difference between the RoRE range of actual and notional gearing is the amount of regulatory equity included so the balance of the incentives is the same as for notional gearing.