

# ENHANCED INCENTIVES

## A note prepared for Anglian Water

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In its PR19 methodology, Ofwat set out its approach for encouraging companies to improve “beyond the best level currently achieved by any company” through innovation and risk-taking. In particular, Ofwat introduced enhanced payments for outperformance and underperformance.<sup>1</sup>

In this note, we first set out a framework for how the rates for enhanced outperformance and underperformance should be calculated. Anglian has proposed its approach for enhanced incentives at PR19. Therefore, in the final section of this note we comment on the robustness and reasonableness of its approach.

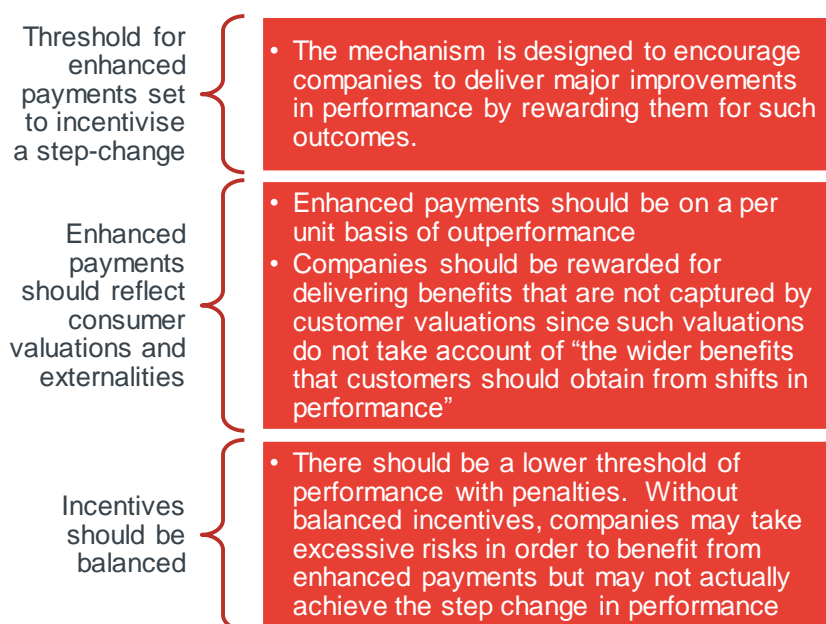
### 1. Introduction

The overall objective of PR19 is to ensure that water companies deliver customers’ wants and needs by setting a five year price, service and incentive package for each regulated water company in England and Wales. As part of this, one of its stated goals is to offer higher financial returns to companies that are “ambitious and innovative ... with high quality business plans that set new standards for the sector” compared to those that just make improvements that keep them in line with the rest of the sector. One of the mechanisms Ofwat is implementing to achieve this is by offering an enhanced incentives mechanism. These mechanisms are only applicable to common performance commitments and are contingent on the company sharing its approach to achieving these with other companies. It is the responsibility of each of the water companies to use the guidance that Ofwat has provided in order to determine the specifications of the mechanism they wish to use. Ofwat identifies three key features that the mechanism should have.<sup>2</sup> These are summarised in the figure below.

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<sup>1</sup> Ofwat, Delivering Water 2020: Our methodology for the 2019 price review, Appendix 2: Delivering outcomes for customers.

<sup>2</sup> See pages 83-87 of Appendix 2.

**Figure 41 Summary of Ofwat guidelines relating to enhanced incentives**

Source: Based on Ofwat Appendix 2

However, Ofwat has provided relatively limited guidance on how to estimate these rates and thresholds in practice.

The rest of this note is structured as follows:

- In Section 2, we provide a general overview of the economic rationale for enhanced incentives;
- In Section 3, we comment on how the rate for enhanced incentives can be set;
- In Section 4, we discuss how the thresholds for enhanced incentives can be set;
- In Section 5, we set out how companies should sense-check their proposed approaches by considering the final set of PCs & ODIs as a package (e.g. impact on RoRE range); and
- In Section 6, we comment on the approach which has been taken by Anglian.

## 2. Economic rationale for enhanced incentives

As described above, Ofwat's main economic rationale for putting in place an enhanced incentive mechanism is to encourage a step change in performance. However, it is typically considered that improvements become progressively harder to achieve the higher the level of performance. Therefore, under the standard price control, profit maximising firms would not have sufficient incentive to invest to achieve a step change. Therefore, Ofwat is seeking to design a mechanism that allows a company achieving such an improvement to earn a higher return than it would under "normal" performance. Ultimately, this higher return is paid for by the customers of that water company. However, the standard performance payments are set with reference to the company's customers valuations of difference performance levels. This means that the value that the company's own customers place on the higher level of performance is not sufficient to justify the enhanced incentives. Ofwat's logic is that the externality benefits of such improvements are sufficient to offset the payments incurred by the customers and that therefore overall welfare is improved. That is, if the mechanism encourages outperformance in a given price control period, then this outperformance results in benefits to customers for all customers in England & Wales in the next price control period.

There are two potential channels for externalities to be generated.

- Through raising performance commitment levels (PCLs) at future price controls
  - A step change in performance by one company can result in tougher PCLs at subsequent price reviews. This could apply through a mechanistic process, for example where Ofwat sets PCLs based on forecast upper-quartile performance, or through a less formal route which requires companies to justify that their PCLs are stretching and ambitious. The externality benefit of the tougher PCLs could arise from two main sources. First, the other companies achieve the tougher PCLs leading to their customers benefitting from an improved service for the same cost. And second, the companies do not achieve the tougher target meaning that the customers will receive the same service for a lower cost once the underperformance payments are included.
- Through the dissemination of new techniques.
  - A company could deliver a step change in performance through some innovative method. This is then shared through the industry driving up performance. The externality would be in the form of improved services (which are valued by customers) or lower cost delivery (of which customers receive a proportion).

In Ofwat's methodology it appears that both these channels are relevant. As we explain below, in practice the first channel provides a clearer and more robust basis to estimate the appropriate scale of the enhanced incentives.

The table below provides some examples of the mechanisms Ofwat and regulators in other sectors in the UK have used to encourage the realisation of positive externalities.

**Figure 2 Precedent for enhanced incentives from other regulated sectors**

Example	Summary
SIM <sup>3</sup>	<p>Under the Service Incentive Mechanism (SIM), Ofwat required companies to submit information on their performance in handling all types of customer contacts.</p> <p>Companies receive rewards and penalties for their customer service performance. Companies that perform materially above the industry average receive rewards, while companies that perform materially below the industry average receive penalties. The scale of penalties is greater than the scale of rewards. The incentive is dynamic in the sense that the rewards and penalties are awarded based on relative performance against an evolving industry average. Over time, the performance of the industry on the SIM score has improved and converged to the extent that the scale of reward for a higher performing company is very likely to be disproportionately higher than the value that customers place on the difference in performance compared to the industry average. However, this is more than matched by the penalties imposed on the poor performing companies. Therefore, at the industry level, customers have benefitted from the strong incentives for improved performance while not paying rewards when averaged across the industry.</p>
Innovation funds in the energy sector	<p>Under the current price controls for energy transmission (RIIO-T1) and gas distribution networks (RIIO-CD1), Ofgem introduced a time limited “Network Innovation Stimulus”. This was to recognise that the “incentives in the price control may not be sufficient to deliver the type and scale of innovation needed to deliver a sustainable energy sector and value for money”.<sup>4</sup> Ofgem identified several reasons but highlighted two in particular. First, the time it would take for a cultural shift towards greater innovation and customer focus. And second, the presence of positive externalities that are not internalised elsewhere in the price control.<sup>5</sup></p> <p>Therefore, Ofgem introduced two annual Network Innovation Competitions (NICs) one for electricity transmission companies and one for gas network companies. Under these competitions, companies compete “for funding for the research, development and demonstration of new technologies, operating and commercial arrangements.”<sup>6</sup> Ofgem reviews and assesses funding applications with the support of three independent expert panels. Similarly to Ofwat’s proposals, Ofgem seeks to “facilitate sharing of intellectual property and lessons learned to ensure that the benefits ... were shared within the industry, and ultimately with consumers.”<sup>7</sup> The innovation fund is paid for by all customers.</p>

<sup>3</sup> <https://www.ofwat.gov.uk/regulated-companies/company-obligations/customer-service/>

<sup>4</sup> <https://www.ofgem.gov.uk/network-regulation-riio-model/current-network-price-controls-riio-1/network-innovation>

<sup>5</sup> <https://www.ofgem.gov.uk/sites/default/files/docs/2010/07/implementation.pdf>; Regulating energy networks for the future: RPI-X@20 Recommendations: Implementing Sustainable Network Regulation, 26 July 2010

<sup>6</sup> <https://www.ofgem.gov.uk/network-regulation-riio-model/current-network-price-controls-riio-1/network-innovation>

<sup>7</sup> <https://www.ofgem.gov.uk/sites/default/files/docs/2010/07/implementation.pdf>; Regulating energy networks for the future: RPI-X@20 Recommendations: Implementing Sustainable Network Regulation, 26 July 2010

Example	Summary
Addressing information asymmetry in the energy sector <sup>8</sup>	<p>Ofgem offers menu regulation to address the information asymmetry between Ofgem and the companies it regulates.</p> <p>Under the Information Quality Incentive (IQI), Ofgem carries out its own assessment of the efficient level of capex, opex and totex for each of the regulated companies. Companies receive a financial reward or penalty depending on how their forecasts relate to the Ofgem forecasts. These rewards are in the form of a higher efficiency incentive rate (i.e. a higher sharing factor that allows a greater recovery of costs).</p> <p>Here, the externality is that all customers benefit from business plans “that reflect best available information about future efficient expenditure requirements” and that do not contain inflated forecasts.</p>
Ofwat fast track business plans	<p>In PR14, Ofwat offered financial incentives in terms of less regulation to incentivise operators to submit “high quality business plans.” That is, business plans with ambitious performance targets. This is because customers in all companies benefit from some companies aiming for more ambitious performance as it raises the standards required of all companies in the price control.</p>

<sup>8</sup> [https://www.ofgem.gov.uk/system/files/docs/2017/01/guide\\_to\\_riioed1.pdf](https://www.ofgem.gov.uk/system/files/docs/2017/01/guide_to_riioed1.pdf)

## 2.1 Threshold for enhanced payments

Ofwat requires each company to define its thresholds for its common performance metrics for each of the five years of the price control such that there are improvements each year (or at least that the performance commitment levels are set to reflect 'stretching' performance). As described above, the threshold of performance above which the company would receive enhanced payments should be set to incentivise a step-change in performance. This is so that companies have the incentive to deliver major improvements in performance. Ofwat states that the threshold should be set "at the performance level of the current leading company, or preferably higher (for example, including a forecast improvement in addition to that performance level)". Companies that are already leading, or close to its performance, would need to demonstrate that the thresholds they set represent a step change.

## 2.2 Level of enhanced payments

Ofwat requires that enhanced payments are set on a per unit basis so that they are cumulative after the threshold point. In addition, Ofwat "will not allow companies to have one-off tranches of outperformance payment that become due at the threshold point". Ofwat also requires that the payment rate "can include wider externalities" where supported by customer and economic evidence. For example, improved sector performance will lead to improved performance of individual companies and therefore benefits the customers of those companies.

## 2.3 Balancing incentives

Ofwat requires that incentives should be "balanced". That is, any enhanced outperformance rate "must be accompanied by an enhanced underperformance rate for below-standard, poor and unacceptable performance". Ofwat notes that if enhanced rates are not balanced, there may be an incentive for companies to take "unreasonable risks to achieve high performance and end up with very poor performance." There may also be an incentive for companies to focus on a small number of performance areas.

Nevertheless, Ofwat notes that it expects that "enhanced underperformance penalties would apply at least at the current lower quartile company performance." Ofwat also requires any company performing below the underperformance threshold "to submit an action plan to its CCGs, setting out the reasons for its poor performance and how it will improve its performance".<sup>9</sup>

The need for balanced incentives also raises the question of whether enhanced incentives should be applied to all common measures or can be applied to just a subset. We note that while Ofwat does not specify that operators are required to implement enhanced incentive mechanisms to all common measures, it is likely to require that companies justify where they have not been implemented<sup>10</sup>. Potential justifications could include measures where outperformance or

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<sup>9</sup> Customer challenge groups

<sup>10</sup> Some common measures are likely to be 'penalty-only'. The case for applying enhanced incentives to these will be weaker.

underperformance are beyond the control of the company and would therefore expose the company to undue risk (for example, very adverse weather).

## 2.4 Practical implementation

As described above, the enhanced performance incentives are only applicable to common performance commitments. This is because data for common performance commitments is available across all the water companies. This means that it is possible to identify a step change in performance with greater certainty than would be possible with bespoke commitments. We also note that the outperformance on a bespoke commitment is likely to have a lower positive externality given that it does not apply directly to other companies.

Receiving the enhanced performance payments will depend on whether the company's business plan includes a credible plan for sharing the knowledge behind their success with companies by the end of the 2020-2025 price review period or soon after. Ofwat considers this "a necessary corollary" of allowing the enhanced outperformance payments to reflect externalities. We do not consider this aspect in detail in the rest of this note.

In response to some respondents to the consultation on PR19, Ofwat notes that it does not consider the enhanced payments to have a downside bias as it does not prescribe where the thresholds and levels of enhanced payments should be set. This implies that there is some scope for interpreting the Ofwat guidelines so that the payments are not equal in absolute terms. Therefore, there may be a need for calibrating the thresholds and levels of payments so that this risk is balanced and not biased in either direction.

## 3. Setting the rates for under and outperformance payments

In this section, we set out how companies could set its rates for under and outperformance payments. In the next section, we describe how the thresholds could be set. We then describe how additional sense-checks should be carried out to ensure that the enhanced incentive mechanism is balanced and that no single performance measure is disproportionately represented.

### 2.1 Rates for outperformance

As described above, the level of the payment per unit of outperformance should reflect both the customer valuation of that metric and as well as the value of the externality. We consider that the main value of outperformance relates to the positive externality. That is, customers of other water companies benefitting in the future if those water companies improved their performance as a result of the frontier company's outperformance in PR19. In principle, this could be calculated using either a bottom-up or a top-down approach. In practice though, as described below, a top-down approach is likely to be more appropriate.

Under a bottom-up approach, the outperformance rate could be estimated as the return that would be necessary for the company to invest in something that leads to a frontier-shifting performance. That is, the return on investment would need to take account of the associated risk. This requires detailed knowledge of the investment that it would need to make and the risk of it not delivering



outperformance, as well as the risk of it resulting in underperformance. This is likely to be difficult to obtain in practice, as well as being dependent on subjective views. Moreover, it does not explicitly reflect the positive externalities of sector wide improvement. Using a bottom-up approach may also encourage a company to pick risky projects in order to justify a material financial upside. Therefore, we recommend a top-down approach under which a multiplier is applied to the standard rate<sup>11</sup>.

This multiplier would need to reflect two factors.

- First, the size of the water company relative to the industry size. The smaller the company relative to the industry, the greater the ratio between:
  - The customers in other companies to benefit from improvements in sector performance; and
  - The own customer base that pays the standard incentive rate.
- Second, the company's customer valuation of the measure relative to the valuation of customers of other companies. The more customers of other companies value this metric compared to the company's own customers, the more they will benefit from improvements in sector performance.

The first factor is relatively easy to calculate using publicly available data on the customer base for each of the water companies. The second factor is harder to calculate in practice given that each individual water company would have limited information on the valuations of customers of other water companies for this current price control. One pragmatic way of addressing this would be to assume that the company's own valuation applies to all companies. This is equivalent to assuming either that:

- Customer valuations of the measures do not vary across companies; or
- The somewhat weaker assumption that customer valuations may vary but that the company's values are unbiased estimates (i.e. that there may be some higher and some lower but they will tend to cancel out).

This approach enables us to estimate maximum reasonable upper-bound for the multiplier than can be justified. It can be considered an upper-bound because it is not possible to identify the counterfactual. That is, it is not possible to be sure that the threshold could be more ambitious as it is not known how other companies will perform and what they think they will be able to achieve. Therefore, it is reasonable to apply a downward adjustment to a multiplier calculated on this basis. This is described in further detail below.

The table below summarises our calculation of the unadjusted multiplier for water supply. This is calculated by dividing the total industry size by the size of the company. It can be seen that there is a very wide of range of multipliers that can be applied depending on the size of the company.

**Figure 3 Calculation of the multiplier (before adjustments)**

Company	Total number of properties connected for water supply (000s)	Unadjusted multiplier

<sup>11</sup> For example, if the standard rate was £10 per unit and the multiplier was 5x then the enhanced rate (in total, i.e. including the standard rate) would be £50 per unit.

<b>Company</b>	<b>Total number of properties connected for water supply (000s)</b>	<b>Unadjusted multiplier</b>
Anglian Water Services	2,105	11.89
Dwr Cymru Cyfyngedig (Welsh)	1,399	17.89
Northumbrian Water Ltd	1,962	12.75
Severn Trent Water Ltd	3,463	7.23
South West Water Ltd	794	31.51
Southern Water Services Ltd	1,078	23.21
Thames Water Utilities Ltd	3,678	6.80
United Utilities Water Plc	3,225	7.76
Wessex Water Services Ltd	593	42.19
Yorkshire Water Services Ltd	2,244	11.15
Affinity Water	1,450	17.25
Bristol Water plc	517	48.44
Dee Valley Water Plc	124	201.69
Portsmouth Water Ltd	307	81.40
Sembcorp Bournemouth Water	203	123.22
South East Water Ltd	897	27.90
South Staffordshire Cambridge	704	35.55
Sutton & East Surrey Water Ltd	282	88.74
Total	25,026	
	Max	201.69
	Min	6.80

Source: Domestic and non-domestic properties connected for water supply at end of 2012/13 ; 2012-13 data from Ofwat's PR14 feeder models. We now have data up to 2016/17 so these numbers could be updated.

The table below summarises our calculation of the unadjusted multiplier for sewerage supply.

**Figure 4 Calculation of the multiplier for sewage services (unadjusted)**

<b>Company</b>	<b>Total number of properties connected to sewerage services</b>	<b>Unadjusted multiplier</b>
Anglian Water Services	2,683,041	9.03
Dwr Cymru Cyfyngedig (Welsh)	1,416,267	17.10
Northumbrian Water Ltd	1,242,969	19.49
Severn Trent Water Ltd	3,947,510	6.14
South West Water Ltd	711,701	34.03
Southern Water Services Ltd	1,919,628	12.62
Thames Water Utilities Ltd	5,640,021	4.29
United Utilities Water Plc	3,228,703	7.50
Wessex Water Services Ltd	1,197,968	20.22
Yorkshire Water Services Ltd	2,233,735	10.84
Total	24,221,543	
	Maximum	34.03
	Minimum	4.29

*Source: 2012-13 data from Ofwat's PR14 feeder models; domestic and non-domestic properties. Includes properties receiving sewage only services and properties receiving water and sewage services.*

### Determining the scaling factor to apply to the multiplier

As stated above these multipliers represent the maximum potential scaling factor. In addition, as the tables above show, there is a very wide range of multipliers that result from simply taking account of the relative size of companies. Therefore, there are a number of considerations in determining appropriate scaling factors to apply to these multipliers. Examples of these are set out in the table below.

**Figure 5 Considerations for determining scaling factors**

<b>Consideration</b>	<b>Description</b>
<b>Discounting for time value</b>	The multipliers do not take account of the delay in realising the benefits (which could be up to five years). Allowing for this would result in a modest reduction (e.g. 5% - 10%) to the multiplier.
<b>Establishing an appropriate counterfactual</b>	The externality benefit estimated using the multipliers implicitly assumes that the benefits would not otherwise have occurred. This is likely to be a strong assumption as there is always a possibility that other companies could have achieved the step-change to deliver the same benefits to customers.
<b>Consistency across companies</b>	One might expect the scaling factors to be broadly similar across companies. For example, the allowed cost of capital and the indicative RoRE range does not vary across companies. As we describe above, the externality may be larger if the company making improvement is small. However, there is no clear justification for rewarding a small company significantly more than a large company for such improvements. Also, it would be disproportionate for customers for that company to bear such large variations in their bills. Therefore, the multiplier values for the larger companies are likely to be most relevant to all companies.
<b>Proportionality across all measures</b>	It is to be expected that common measures will account for a large share of the overall ODI RoRE range <sup>12</sup> and have greater financial incentives than bespoke measures. At the same time, if the multipliers are too large then the relative importance of some common measures in the RoRE range may be considered disproportionate. This could raise the concern that a company might over-focus on a few measures and deprioritise the bespoke measures.

Overall, these factors would imply a scaling down of the multipliers to set the adjusted multiplier for enhanced incentives (with a greater reduction for smaller companies). The exact level of reduction is hard to determine exactly or in advance, as it involves a balancing of the criteria above.

## 2.2 Rates for underperformance

Ofwat does not provide a specific methodology for calculating the level of payment per unit of underperformance. However, as described above, Ofwat requires that the rates for outperformance and underperformance are “balanced”. This is to limit the incentive for the company to engage in excessive risk taking in order to achieve payments for outperformance.

In practice, it is difficult to determine the relative probabilities of under or out performance for a given performance measures. This means that it may be more pragmatic to consider “balance” in terms of the payments rather than attempting to balance the relative risks. This would mean that once the rates for outperformance have been set, there are a number of options for interpreting the Ofwat guidance. These include:

<sup>12</sup> The range of return on regulated equity for outcome delivery incentives.

- The adjusted multiplier applied to the standard payment should be the same for both underperformance and outperformance;
- The absolute difference between the standard and the enhanced payment should be equal; and
- The penalty for underperformance should be the same as the payment for outperformance in absolute terms.

Given that these three interpretations each meet Ofwat’s requirement for balance, the choice between them would be pragmatic. As described below, the choice may also depend on the calibration of the calculations.

#### 4. Setting the thresholds for under and outperformance payments

In this section, we summarise our understanding of the Ofwat guidance in this area and how it could be interpreted in practice.

As described above, where companies choose to set enhanced incentives for themselves, they are required to define thresholds for common performance metrics for each of the five years of the price control such that there are improvements each year. Ofwat states that in practice, this threshold should be “set at the performance level of the current leading company, or preferably higher”. Companies that are already leading, or close to its performance, would need to demonstrate that the thresholds they set represent a step change. Ofwat notes that it expects that “enhanced underperformance penalties would apply at least at the current lower quartile company performance.”

We consider that there are several additional factors that need to be considered when setting these thresholds. These are described in the table below.

**Figure 6 Additional factors to consider when setting thresholds**

Factor	Consideration
The intention to improve standards sector-wide	<p>We note that setting the threshold at the performance level of the current leading company is unlikely to lead to a “step change” in industry performance but rather to the industry simply catching up with the best in the industry.</p> <p>If the intention is to improve the whole sector across regions, then there should be an incentive for companies to go beyond the current leading company. We would also expect companies to all face the same threshold, potentially adjusted for region specific characteristics</p> <p>An exception to this could be where a company faces external conditions or environmental factors that make it especially challenging to reach the current leading performance. In this case the innovation necessary to achieve this level could well result in benefits for the sector as a whole. While this would be a valid scenario, Ofwat would probably expect robust evidence in relation to the external factors.</p>

Factor	Consideration
Balancing the marginal benefits and marginal costs of outperformance	After a certain point, the marginal benefits, including any externalities, of outperformance are likely to be declining. Further, the marginal costs of outperformance are likely to be increasing as it becomes harder to identify and implement efficiency gains. Therefore, a threshold that balances these costs and benefits is likely to be relatively close to the performance of the leading company.
The number of measures to which the enhanced incentive mechanism applies	Where the mechanism only applies to a small number of measures, there may be a greater incentive to focus on improving those measures to the detriment of other measures where there are no enhanced penalties for under performance. Therefore, setting the outperformance threshold too high could result in greater risk taking in order to achieve it.  As described above, although Ofwat does not specify that enhanced incentives should apply to all performance measures, it is likely to require objective justification if a company chooses not to apply them to specific measures. It is also likely to make a comparison across all companies to see which measures are included.
The relationship with the thresholds for underperformance	If the threshold for underperformance is too low relative to the threshold for outperformance, then this may increase the incentive for a company to take excessive risks to achieve the outperformance.
Performance measures to which only penalties apply	For these, the definition of outperformance would need to be considered carefully. Companies would also need to justify to Ofwat why an enhanced mechanism should apply given that the focus is on incentives to improve.

## 5. Sense-checking the approach

Having proposed an approach for enhanced incentive rates a company should then sense-check what it implies in terms of its overall package of PCs & ODIs, and ensure that its final package is balanced.

Ofwat will consider the final package of PCs & ODIs for each company in terms of the impact of RoRE. In contrast to PR14 where a cap was set, in PR19 Ofwat has set an indicative RoRE range of  $\pm 1$  to  $\pm 3\%$ . Ofwat requires supporting evidence if a company's proposals fall outside of this range.<sup>13</sup> Therefore, if the multipliers result in the RORE range exceeding  $\pm 1-3\%$ , then this would indicate that downward revision of the multiplier could be appropriate.

Second, the RoRE range provides a useful tool for comparing the scale of incentives and ensuring this is reasonable. Again, this will involve an element of subjective judgement. Example criteria could include: whether any one measure accounts for more than 50% of the RoRE upside and downside, or whether the top three measures account for more than 75% of the upside and downside.

Third, we would expect that the RoRE range for measures relating to water and measures relating to waste water would be broadly balanced (given that Anglian's activities are broadly equally split between water and waste water).

<sup>13</sup> Ofwat states "This evidence should cover why they believe the strength of their proposed package is in line with their customers' views and how it provides sufficient and appropriate incentive to stretching performance."

## 6. Assessment of Anglian's approach to enhanced incentive rates

Anglian has proposed an approach for setting enhanced incentives. In this section we review its approach and comment on the reasonableness of its assumptions, and the extent to which we believe it satisfies Ofwat's guidance.

### 6.1 Anglian's approach to setting the enhanced rate multiplier

Anglian is proposing an enhanced rate multiplier of **4.29** – i.e. the enhanced rates are equal to the standard rates multiplied by 4.29. This is to be applied to all measures where enhanced incentives are proposed.

Anglian's rate is based on a top-down approach and linked to the number of customers in other regions. This is because it reflects the spirit of the regulation whereby a frontier-shifting performance is assumed to benefit customers in other regions. A bottom-up approach could have been used instead where the size of any outperformance payments is linked instead to the incremental cost of achieving the frontier-shifting performance. However, Anglian believes that cost estimates for going beyond the frontier may be less robust, and that this would also not really capture the externality of benefits to customers in other regions. We agree with the rationale of using a top-down approach.

Therefore, as a first pass, Anglian considered its own customer multipliers of 11.89 for water and 9.03 for wastewater – i.e. those set out in Figures 4 and 5 above. However, it is ultimately of the view that applying these numbers could result in overly large outperformance payments and also potentially large impacts on customers' bills. As set out in Figure 6 above, there are various deflators which could be applied to these multipliers to make them smaller. For example, the rates could be deflated to reflect an element of discounting. This is because if Anglian were to have a frontier-shifting performance, it would benefit customers in other regions – but only in the medium run. This means that Anglian may need to be drawn on estimating how long it would take for its frontier-shifting performance to start impacting on customers in other regions, and ultimately this is unknown and unverifiable. Anglian believes that it would not be possible to explicitly model these deflators in a robust way. And therefore, it has decided to apply judgement.

It has decided to base its multipliers on those faced by the largest water company in England & Wales, in terms of customers. The multipliers for Thames Water are 6.8 for water and 4.29 for wastewater. The rationale is that across the PR19 framework companies are expected to face broadly similar levels of risk and reward after controlling for size. For example, Ofwat expects the RoRE range impact of ODIs to be between +/-1-3% for *all* companies. Given that the multipliers range from x4.29 for Thames to as much as x81.4 for Portsmouth this could imply that companies would face significantly different levels of risk and reward just because of differences in size. Therefore, if Thames faces the smallest multipliers, then by extension these same multipliers should be enough to incentivise other companies. Or in other words, it would not feel appropriate for

Dee Valley to receive outperformance payments which are nearly 50 times greater, in RoRE terms, than those that Thames would receive for the same frontier-shifting performance. We believe that this approach is reasonable and would ensure that the strength of incentive faced by Anglian is in line with that faced by other companies.

Also, rather than having two separate multipliers (one for water and one for wastewater) Anglian has decided to apply the lower, more conservative figure of 4.29 for all measures. This is to avoid a situation where Anglian faces different multipliers for different measures which could potentially distort incentives. (This is also more conservative in Anglian's particular case because it is currently industry leading in leakage, which is a water measure).

Anglian has also sought to sense-check its proposal with insights from its customer research. Anglian carried out its 'Valuation Completion Report' to estimate willingness to pay (WTP) for a range of service quality improvements related to water resources. WTP surveys tend to ask customers for (i) their willingness to pay for improvements to individual measures of service quality (e.g. supply interruptions only); and (ii) the overall willingness to pay for a package of service quality improvements. It follows that the sum of WTP values across individual measures could exceed the overall WTP value for the total package. For example, a customer may be willing to pay £1 each for 10 separate improvements, but subject to an overall cap of £5 in total (i.e. where £1 x 10 is greater than £5). To deal with this issue, companies tend to 'scale' downwards the WTP values for individual measures such that they match the WTP for the overall package. Anglian's results suggest that the 'unscaled' WTP value for leakage is actually 4.21 times greater than the 'scaled' value. Therefore, if Anglian applies an enhanced multiplier of 4.29 (broadly in line with the 4.21 scaling figure) to its standard rate, it could be seen that this actually corresponds to 'unscaling' of the customer valuations. Or in other words, any outperformance payment for leakage could still be seen to reflect customers' unscaled valuations. We believe that this is a positive result which helps to alleviate concerns that enhanced rates lead to a situation where customers end up paying more than they value service quality improvements.

## 6.2 Anglian's approach to setting the threshold for enhanced rates

Anglian's proposed enhanced multiplier of 4.29 would be applied to all common measures where it proposes to add enhanced incentives. However, for setting the threshold, a more measure-specific approach may be appropriate. We understand that Anglian is proposing enhanced outperformance payments for leakage only.

Owat states that the threshold should be set "at the performance level of the current leading company, or preferably higher (for example, including a forecast improvement in addition to that performance level)". Given that Anglian is already the frontier performer for leakage, one strict 'letter of the law' interpretation of the guidance would be that it could earn enhanced outperformance payments for any unit of improvement beyond its current level. However, in the context of the "or preferably higher" in Owat's guidance, Anglian believes that it would need to demonstrate an improvement beyond its current



performance level before being able to earn enhanced outperformance payments.

Anglian expects its end of AMP6 performance for leakage to be 177 MI/d. Its proposed performance commitment for AMP7 starts at 175 MI/d in 2020-21 and ends at 166 MI/d – i.e. it is committed to shifting the frontier performance in each year of AMP7. This is shown below.

**Figure 7 Anglian’s proposed PC for leakage**

	2020-21	2021-22	2022-23	2023-24	2024-25
Performance Commitment	175	173	170	168	166

Source: *Anglian Calculations*

Note: *Leakage levels are in MI/day (using 3 year averages)*

Anglian is therefore proposing to set the enhanced threshold at the level of its performance commitment – i.e. it would earn enhanced outperformance payments from every unit of outperformance beyond the PC. Given that the PC goes beyond the current frontier performance and the forecast end of AMP6 frontier performance we believe that this approach is consistent with Ofwat’s guidance.

Ofwat has also commented that where companies add enhanced incentives for measures they must also include the scope for enhanced underperformance payments. This is to safeguard customers against a situation where companies take very large risks in an attempt to earn enhanced outperformance payments and end up performing very badly. To satisfy this point, Anglian has set the threshold for enhanced underperformance payments at the level of the current lower quartile performer, scaled appropriately to reflect Anglian’s size. This level is 267 MI/d. We believe that this approach is consistent with Ofwat’s guidance.