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By email

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Dear David

## Slow track draft determinations: Severn Trent response

Throughout the PR19 process we have engaged with the development of Ofwat's proposals in a positive and pragmatic manner so that we can deliver the best possible outcomes for customers. To this end, we have appreciated Ofwat's very constructive and open approach to engagement.

Our acceptance of fast-track status followed careful consideration of the overall levels of stretch we would face on totex and performance commitments, and the associated incentive rates, caps and collars that would apply. Alongside this, we consistently supported the proposed range for the weighted average cost of capital (WACC) and used Ofwat's early view (accepting that some changes would be made to reflect the latest market information) to assess the balance of risk and return we would face. That is, we accepted the package 'in the round'.

The recently published slow track Draft Determinations provide an update on key industry wide issues, notably on the WACC and updates to the cost assessment. In a number of areas we believe the slow track determinations represent a real step forwards including a pragmatic approach to developer services cost assessment and more investment in strategic water resource schemes.

However, we have one serious concern relating to the overall package and the balance of risk and return (which is compounded by a second issue in relation to Business Rates). Ofwat's latest position on the WACC represents a very significant shift in the overall package we are presented with. For this reason, the overall reasonableness of the WACC and how it impacts the balance of our plan, is the principal focus of our response. Consistent with our earlier discussions, we have confined our representations to a small number of sector wide issues or where the draft position (on performance commitments) would lead to Severn Trent being an outlier. In the enclosed chapters we address:

- risk and return – relating to the cost of capital; implications for notional financeability; and a formula error for how opex and capex have been allocated in the suite of models;
- cost efficiency – relating to Business Rates; the developer services information request; and strategic water resource schemes; and
- outcomes – relating to new interventions that create sector wider issues (supply interruptions and CRI) or reflect decisions that make Severn Trent an outlier (SIM, mains repair and unplanned outages) – we also provide additional clarifications relating to some performance commitments and an update on our current sustainable sewage treatment performance commitment (which is relevant for our PR14 reconciliations).

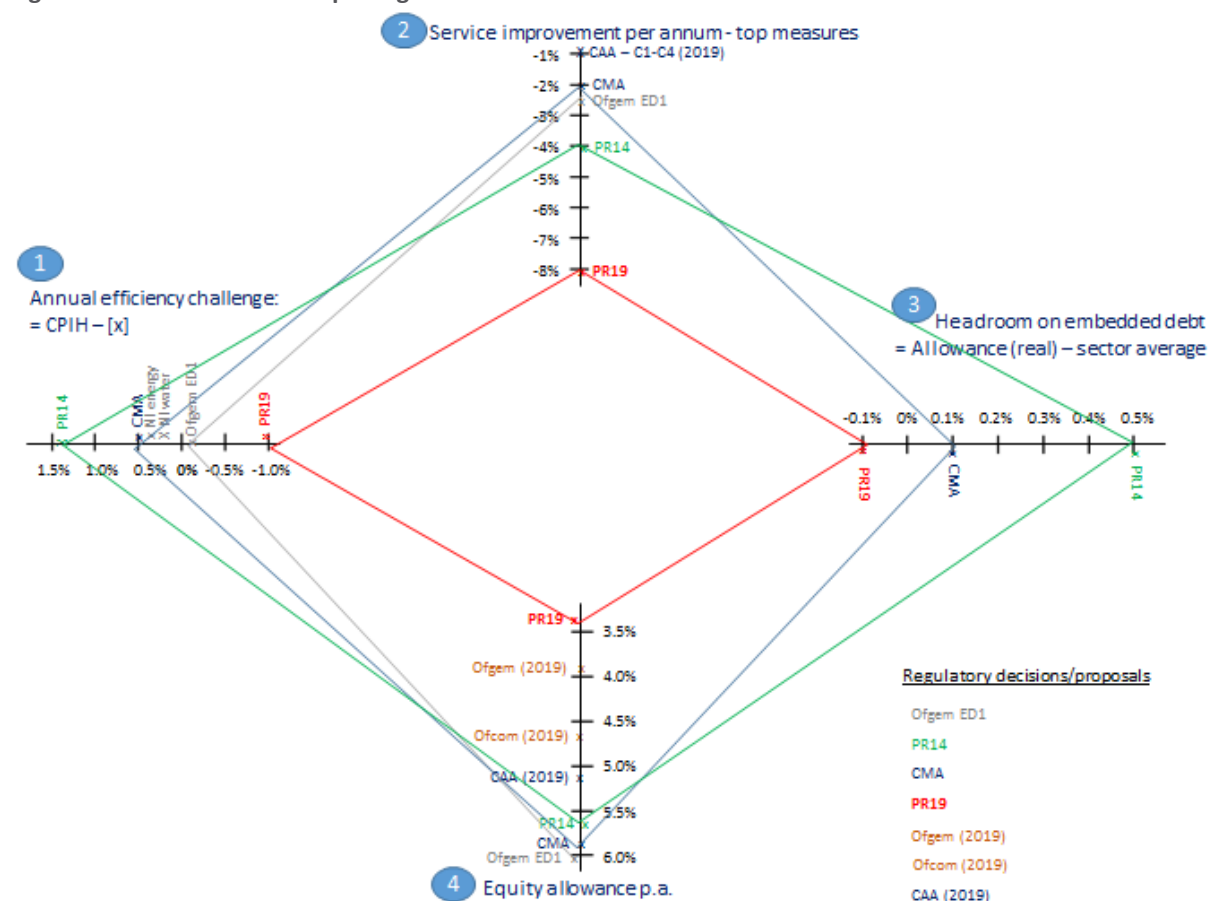
Below we discuss the proposed reduction in the WACC and the implications this has on the package in the round and our financeability, before discussing Business Rates, the pragmatic approach to developer services and an overview of the key issues on the outcomes interventions.

## Package in the round

We understand, and largely support, Ofwat's focused assessment of each regulatory building block – to do otherwise for 17 companies would be impractical. However, we think it's important that Ofwat also takes an overall assessment of the reasonableness of the outcome for customers, companies and their investors. **When we examine the package in the round – looking at the required service improvements, productivity improvements and cost of debt headroom – the PR19 decisions would seem to represent, by a large margin, the most challenging review in recent history, for the lowest assumed base return on equity.**

This can be illustrated in the diagram below whereby we have plotted what we consider to be the four primary factors that impact the balance of risk and return in business plans: service improvements; efficiency challenge; debt challenge (using an assumption on embedded debt); and equity returns. This analysis has been carried out using the most recent price reviews – PR14, CMA decision on Bristol, Ofgem ED-1 and PR19 and other regulatory announcements (eg CAA, Ofgem, Ofcom).

Figure 1 – Assessment of the package in the round



In forming a view on reasonableness, we had expected to see the regulatory decisions intersecting – for example one price review might have set more stretching service improvements but less demanding productivity improvements. However, **at PR19 every parameter is tougher relative to other determinations**, evidenced by:

- the extremely stretching service improvements for the comparative measures, which requires on average an 8% annual improvement for customers to be delivered otherwise penalties are incurred (this contrasts with the performance challenge of 2-4% set by the CMA, Ofgem and Ofwat in previous reviews);
- the most demanding productivity improvements compared to any other regulator in recent history, with the improvement being double what the CMA set and occurring on top of our UQ efficiency challenge;
- the absence of any headroom on embedded debt (for the average company), contrasting with PR14 and the CMA decision; and
- the DD proposed approach on beta and the risk free rate which would result in the allowed cost of equity being lower than at any other time in UK regulatory history.

This latter point is critical and has contributed to a 21bps reduction in the WACC compared to the early view that we used when developing our plan. And while we recognise the desire to update this early view with prevailing market information, this appears to have been undertaken as a new and independent exercise – one which does not pay sufficient regard to the early view methodology that companies relied upon when developing plans and accepting IAP/Draft Determination decisions.

Ultimately the decision on the WACC is critical to delivering better customer outcomes because it facilitates stable and low cost financing conditions within which the substantial investments required for outcome improvements can be provided. We can understand why, including given experience of financing cost out-performance at previous controls, there is such emphasis being put on pressing for a lower WACC. However, the introduction of cost of debt indexation addresses what has been the principle source of past financing cost gains. Accordingly the decision to set a lower WACC now and potentially even lower in December raises a serious risk that the resulting package is not conducive to delivering the best outcome for customers.

We believe that there are three key areas that have contributed to this revised WACC figure that warrant re-consideration of the evidence to ensure that the overall package remains stretching, but fair. They are covered in more detail in our main response and summarised below.

- **Beta** – estimating this parameter over two years instead of a longer timeframe leaves too much potential for short-term temporal distortions to impact the calculation of beta. This point was made in Recommendation 2 of the UKRN report where authors of the report are, on balance, in favour of choosing a relatively long time period, for example, 10 years, when estimating the WACC. When the early-view WACC was presented, a key feature that supported the reasonableness of using a daily 2-year unlevered beta estimate of 0.32 was that it was broadly in line with the longer term daily 5-year unlevered beta estimate (0.33) and the long range view. This is no longer the case – the daily 2-year beta estimate of 0.29 used in the Draft Determinations, or the 28 June 2019 estimate of 0.26 now contrast sharply with the 5-year view. To balance Ofwat’s understandable desire to take into account more recent market evidence, with the apparent issues associated with using a short term 2-year data set to estimate beta, we believe a more reasonable position could be achieved by using the daily 5-year beta.

- **Risk free rate** – in the latest calculation of the WACC, Ofwat has given 100% weighting to RPI linked gilts, which is a significant move from its early view, which gave 100% weighting to nominal gilts. We think it's important to the credibility of the regulatory framework that decisions are coherent across different aspects of the regulatory building blocks. Given that the Government has moved away from using RPI, and Ofwat too has adopted alternative indices in other areas of the price review, we strongly believe that Ofwat's estimate of the risk-free rate should revert to being based on nominal gilt yields – as in its early view – and not based on gilts linked to the discredited RPI index.
- **Cost of debt** – Ofwat's proposals involve the cost of new debt being funded in line with the average of A/BBB non-financials (with a tenor of 10 year or more) less a deduction to reflect a 'halo effect' that water companies have when raising debt – a position that draws heavily on historic performance when water companies were able to operate at a higher credit rating. We don't think this is reasonable in light of the financial ratings of the notional companies and the position from the early view should be retained.

**If Ofwat ultimately decides to proceed with the downward adjustment to the WACC, then it is critically important that there are corresponding adjustments elsewhere to ensure the package is fair in the round.** Such adjustments would aim to create more balance in other areas of the price review where Ofwat has also taken an extremely stretching position. Specifically this would involve:

- reducing the cost efficiency challenge either by weakening the UQ catch-up and/or reducing the on-going efficiency challenge;
- setting more realistic targets for performance commitments, whereby for a number measures, such as supply interruptions and CRI, a majority of companies are unlikely to meet the extremely demanding targets, not only resulting in significant penalties, but also creating serious reputational issues for the sector; and
- accepting representations to use the financial levers to address notional financeability constraints.

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## **Business Rates**

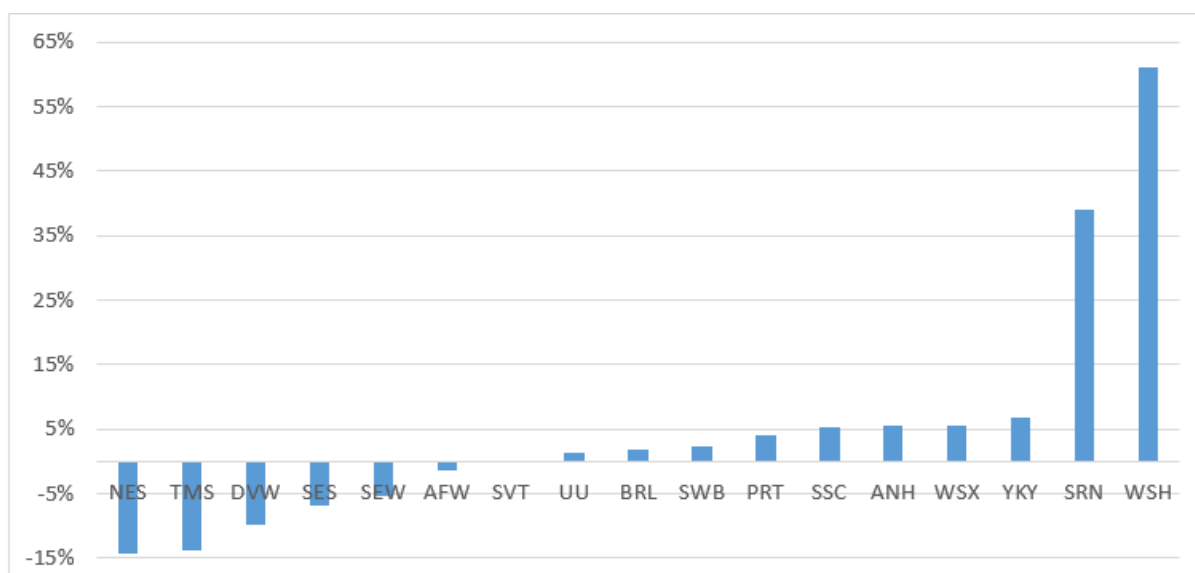
In the Draft Determination, it is assumed that Business Rates in 2020-2025 will largely be the same as the costs incurred in 2017/18. The implication is that the revaluations in 2021 and 2024 will have no material impact on Business Rates.

We understand the reasons for Ofwat's position and typically would support simplified solutions like this given the uncertainty with forecasting rates. However, given the importance of tax to the reputation of the sector, we think an alternative approach should be considered that minimises the risk of winners and losers.

At the heart of the issue is the potential for windfall gains on this tax. Such an outcome would be counter to the recommendations of the National Audit Office that Ofwat should look to increase the pass-through to customers of costs or benefits which are outside companies' control, such as general movements in taxation or borrowing rates.

This potential for windfall gains can be illustrated by looking at how companies have performed this AMP6 on business rates when a similar approach to PR19's cost assessment was adopted. As can be seen below two companies have significantly outperformed Ofwat's allowance by more than 35% whereas five companies have underperformed by more than 5%.

**Figure 2 – Business rates performance against Ofwat allowance - AMP6 to date**



Besides the reputational impact of companies “winning” on tax, this outcome also means Welsh customers have on average paid £6.70 per year more than they should have whereas customers of Northumbrian Water have paid on average £3.30 per year less than they should have. We do not think it is in customers’ interests or the reputation of the sector that such gains should be earned from outperforming the assumptions on Business Rates.

We believe this issue can be readily addressed by introducing two small amendments to Ofwat’s approach, which the majority of our customers supported when testing options with them:

- Use the VOA’s draft (water) RVs published in October, which would be similar to the approach adopted at PR09; and
- Establish a true-up mechanism similar to Corporation Tax, but with a sharing rate, which is what one of our customers suggested (eg 75:25 - customer:company).

## Developer services cost assessment

The updated approach to developer services cost assessment set out in the slow track draft determinations is a welcome development. The move from a separate enhancement model used at the IAP, to inclusion in an expanded set of botex econometric models (termed botex+) is a pragmatic and effective solution to the known data problems in this area.

We believe, as Ofwat has done, that it is reasonable to assume that new development will affect all companies and that on-site activity at a high level is scalable. We’re also pleased that the incorporation of developer services does not appear to have affected the predictive power of the botex models more broadly.

We understand that Ofwat is continuing to explore whether a separate model that improves on the earlier version used at the IAP could be developed in time for the final determination. We agree with the need to develop such models, however, we believe this will be better done at PR24.

For PR19 we don't think it will be possible to address the data quality issues in such a short space of time. Ofwat has rightly explored a number of different options throughout the PR19 process before landing at the current approach. Given the challenges the sector has had with the data on this issue (eg producing granular developer services data) we don't think the responses to the most recent data request would support cost models that are robust and capable of producing sensible results, particularly when compared to the current approach. Such an endeavour would also seem to introduce unnecessary risks for error at this late stage when the current pragmatic solution works sufficiently well. We are therefore very supportive of the current approach to developer services and believe that should be retained for the Final Determination.

## Outcomes

In the Draft Determination new interventions on outcomes have been published that we believe risk creating sector wider issues (eg supply interruptions and CRI) or reflect decisions that make Severn Trent an outlier (SIM, mains repair and unplanned outages). We address the sector wider issues first before addressing the remaining points in turn.

### SIM penalty

In the DD the incentive payment for SIM has been calculated by applying the incentive rate to retail revenues **in every year of AMP6**. This is despite Ofwat's decision "*...not to run the SIM in 2019-20, but to run a shadow version of C-MeX instead.*"<sup>1</sup> The consequence is that the incentive rate that is applied to 2019/20 retail revenues is based on average SIM performance in the four preceding years.

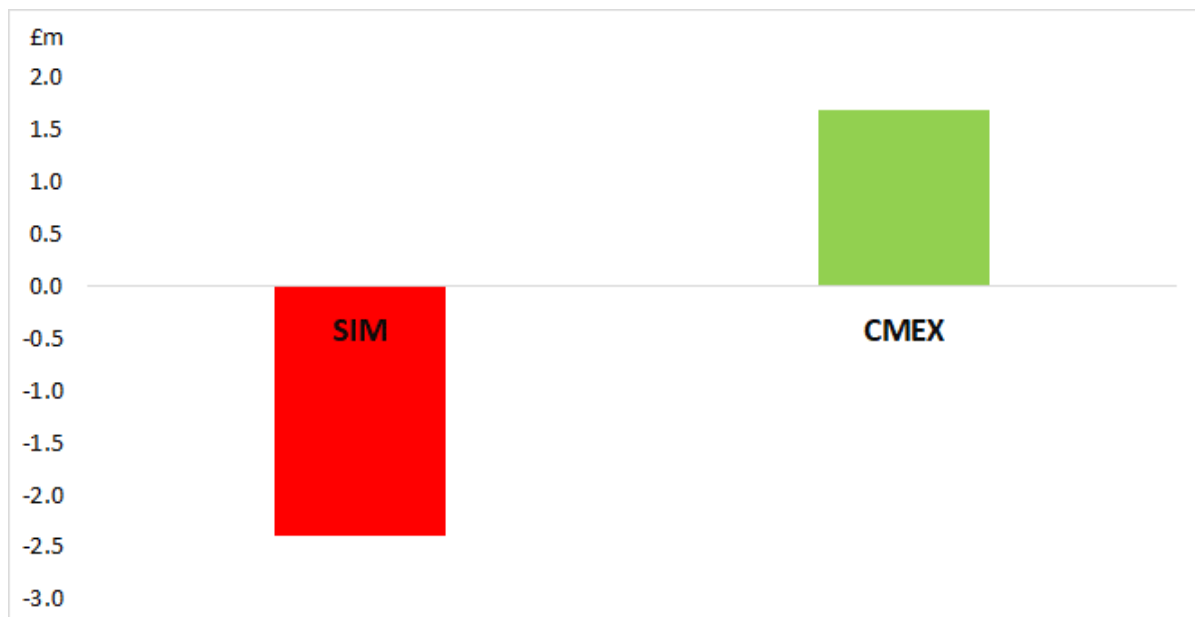
Our concern with the proposed approach is that the financial incentive payments are disconnected from the true level of performance for 2019-20 – this is particularly relevant for Severn Trent given our significant improvement in performance (as reflected in the service element of CMEX). If a PC is to be retired and replaced, and performance data no longer collected, then the same should happen with its financial incentives.

The potential challenges associated with applying a financial incentive in a transitional year when no actual SIM results are available are perhaps best illustrated by looking at the CMEX performance results for Q1 this year. If we take these as a proxy of the full-year SIM results for 2019/20, then we would be due a reward of £1.7m instead of the £2.4m penalty that is being applied through the 5-year application of SIM.

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<sup>1</sup> "Delivering Water 2020: Our methodology for the 2019 price review – Appendix 3: C-MeX and D-MeX," p6

Figure 3 - 2019/20 incentive payment using SIM v C-MEX scores



The obvious rebuttal to this approach is that as CMEX uses a different methodology to SIM, a different result might be expected even if there is no change in underlying performance. So, we've carried out cross-checks to make sure that we're not overstating the performance implications of CMEX, simply because of the methodological changes. By blending the CMEX data (service component) with the existing SIM scores we can estimate a 5-year average<sup>2</sup> score for AMP6. The proxy results that then emerge see our **current 2.02% (£12m) eliminated**. All of this emphasises the prospect that the incentive payments attributable to 2019/20 will be very much at odds with the performance we have provided to customers for the year.

We're not suggesting that CMEX should be used to proxy the SIM incentive payment given CMEX is in shadow form (although it would be more appropriate than using historic SIM scores). However, the Q1 CMEX scores do highlight the extent of the risks and challenges when applying incentives that are 'blind' to performance.

The shadow reporting of CMEX means that there is already a reputational incentive in place to take over from SIM for 2019/20. This supports limiting the financial incentives for SIM to the four years from 2015/16 to 2018/19.

### Supply interruptions – target

The use of the forecast UQ (3:00) for supply interruptions raises significant concerns about deliverability given that the actual UQ has ranged between 06:18 and 07:43 in this AMP. In fact only one company has achieved less than 03:00 during that time and even with the glidepath based on current performance every company except Portsmouth would fail. Such an outcome would be hugely damaging to the reputation of the sector and arise due to the imposition of a target with c~50% improvement for the majority of companies (one and a half times as large as the challenge on internal sewer flooding and pollution incidents)

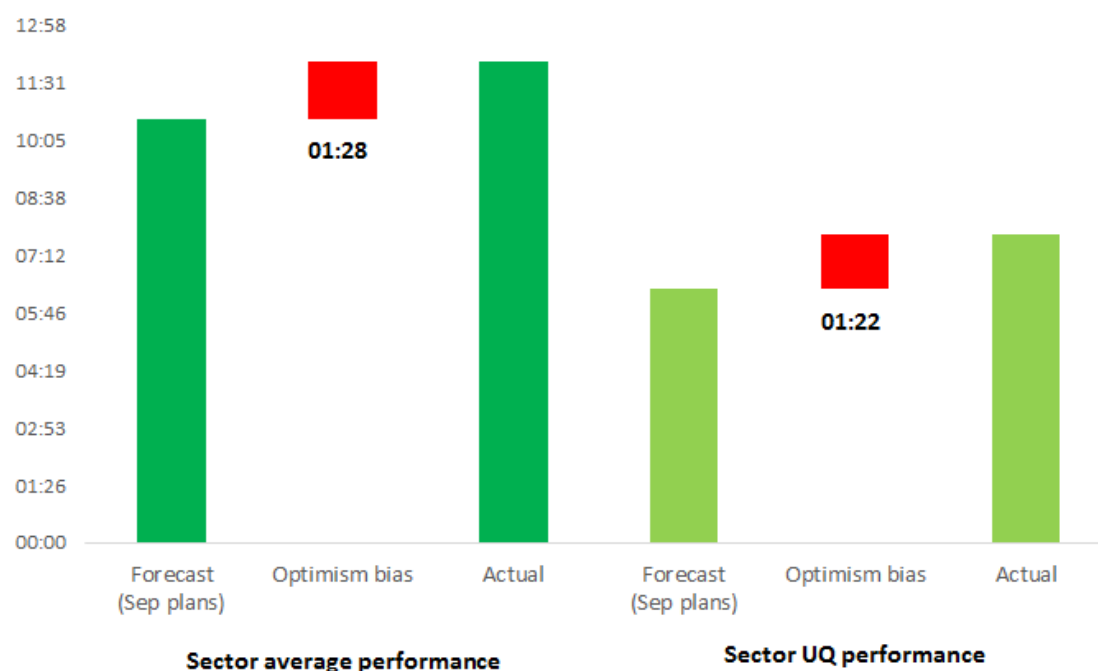
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<sup>2</sup> We have used industry wide CMEX data for other companies that is on an aggregate basis (which is the only published version), and only the service scores for Severn Trent. The details of how we carried out our calculations are provided at Annex A to this document.



We recognise that the target included in the Draft Determinations has been set on the basis of company forecasts from the September plans. **However, these forecasts suffer from a strong optimism bias.** This can be illustrated by comparing what companies said they would deliver for 2018/19 in their September plan with what they actually delivered. This is presented below for both average performance and UQ performance.

**Figure 4 - Supply interruptions 2018/19 performance**



This analysis demonstrates that there is a clear and compelling case for adjusting the proposed UQ target to account for the known optimism bias and promote a more realistic and yet still very stretching target. To ensure consistency with the PR19 methodology we are proposing that the optimism bias should be calculated on the UQ, as opposed to sector average. This would lead to a small uplift to the targets of 1:22 each year, as set out in the table below.

**Table 2 – proposed revisions to UQ targets**

	Year 1	Year 2	Year 3	Year 4	Year 5
DD target	05:24	04:48	04:12	03:36	03:00
Optimism bias	01:22	01:22	01:22	01:22	01:22
Revised UQ target	06:46	06:10	05:34	04:58	04:22

### CRI penalty

In the slow track DD our incentive rate for CRI, along with some other companies, has been increased by approximately 50% from £1.26m to around £1.9m. The reasoning for this intervention is that *“the underperformance rate increased due to poor performance”*<sup>3</sup> and that *“the company requires a stronger incentive to ensure planned improvements are sustained.”*

<sup>3</sup> PR19 draft determinations: Delivering outcomes for customers’ policy appendix, p76, section 4.4.6.

The decisions would lead to CRI being the third highest powered incentive on average, whereby companies could easily incur £50m in penalties over the AMP. We have a number of significant concerns with an intervention of this magnitude, notably:

- no account appears to have been taken of the risks associated with reporting on the CRI - the methodology is relatively immature compared to other PCs, assessment is more reliant on individual assessors (as opposed to automated processes) and companies have had to develop new reporting processes – under the risk based approach to assurance advocated by Ofwat, if this was one of our other performance commitments we would regard this as a higher risk measure that we would apply a third line of external assurance to; and
- the increase in the penalty rate for Severn Trent has occurred despite improving performance.

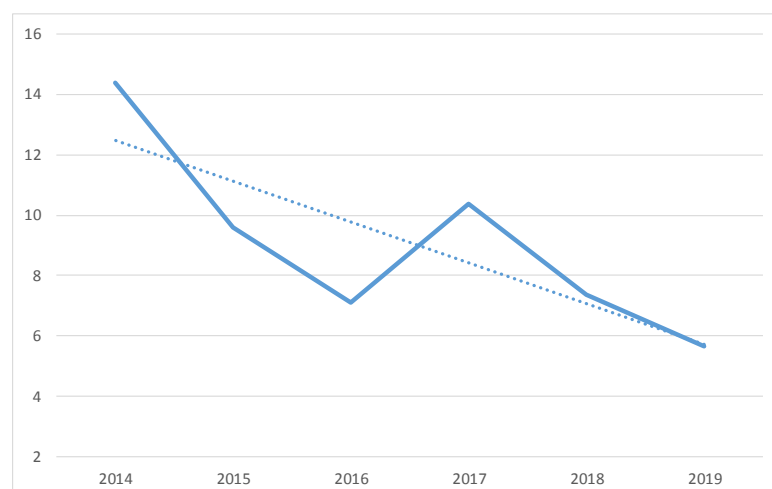
In other areas scores don't reflect the perspective of customers but rather views of small panels of analysts. For example, on the taste and odour component the assessment relies on each company having a panel that judges the taste and odour of drinking water. These results contrast significantly with the (audited) customer complaints data on taste and odour with no correlation between the two data sets (the correlation coefficient is 0.05).

We also note that there are a number of process issues that need be addressed to ensure this measure has the same level of robustness as other high powered ODIs like sewer flooding. For example:

- the assessment process is not time bound, so performance from prior years impact scores for multiple years moving forward – this means AMP7 scores will be impacted by AMP6 performance;
- companies are not provided with performance updates until the year is largely over, limiting the ability to actually respond to the incentive in-period; and
- there is no known external assurance process by an independent party, which is particularly important given the size of the incentive, the maturity of the measure and we believe would be expected for a comparable ODI with a reward element.

A further issue with the intervention is that our actual CRI performance has been improving throughout AMP6, despite the absence of any financial incentive. In the figure below we have illustrated CRI performance and also plotted the trend line, which shows a strong downward slope and this can be observed on both a linear and exponential basis.

**Figure 5 – CRI performance over AMP6**



Our improvement in CRI has occurred despite the fact that there is no financial ODI for performance. What substantially drives CRI is the importance of water quality to our core being and the DWI's own, very public and sanction backed, enforcement powers which together provide a strong incentive to improve. This is illustrated by our improvement following the issuing, in AMP5 of 'All Sites Notices' for District Service Reservoir and Water Treatment Works. Our improved performance over AMP6 has been recognised by the DWI and in 2018:

- the Water Treatment Works All Sites was rescinded; and
- the District Services Reservoir All Sites Notice was successfully revised to remove the "All Sites" element

Given the fact that we have demonstrated an improving performance on the CRI and the DWI deemed it appropriate to remove the All Sites Notices, we believe that there is a compelling reason for Ofwat to have confidence that the current incentive framework and the £1.26m/ point that we signed up to as part of our IAP actions will continue to drive performance improvements.

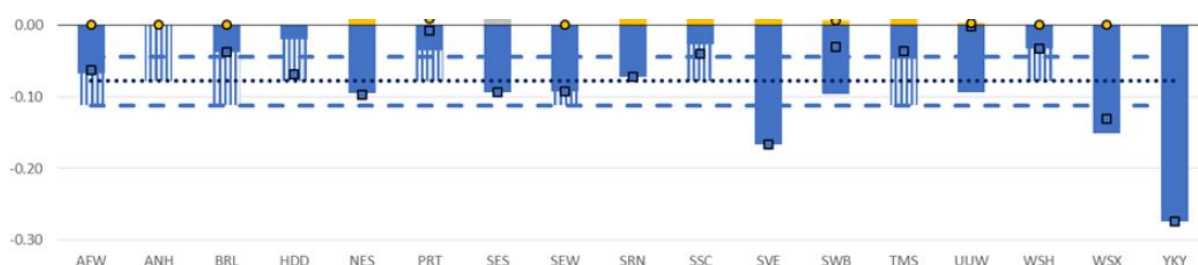
For these reasons we don't think CRI incentives should be uplifted for PR19. Instead like the approach adopted for shadow measures, we believe there is a need for more effort to promote greater consistency. For example through the use of independent assurance (which the sector would fund).

### Mains repairs

In the slow track DD a number of interventions were specified that result in our measure being an outlier as it relates to both the target and incentive rate.

In the DD our incentive rate for outperformance has been reduced, **however the penalty rate has been retained at a level that is well outside what is deemed to be an acceptable range**. It also means that our penalty rate is the second highest of any company and more than double the average of the acceptable range (£0.167 v £0.0805per-household per-burst per-1,000km of mains).

**Figure 6 – DD reasonable range for mains repair incentive rates (£/household/burst per 1,000km)**



We also note that our target has been set at a level that is better than the defined 'good' level. In contrast many slow track companies have had a much weaker target allowed.

The combination of these two interventions means that our package is disproportionately weighted to the downside compared to other companies. The simplest way to address this outlier would be to reduce the penalty rate consistent with the intervention on the reward rate. This would also ensure consistency with other draft determination decisions where companies like South East (leakage) and Southern (drinking water complaints) that had penalty rates reduced to ensure alignment with the reasonable range.

### Unplanned outages

In the slow track DD a sector wider intervention has been put forward, whereby all AMP7 targets for unplanned outage are to be set at least as high as the good level of 2.34% (the one exception being Southern given the significant step change required). An important feature of the intervention method is that it is set on the basis of an **improving profile from 2020/21** to the good level in 2024/25. In other words the target is graduated to create a glide-path to improve the deliverability of the new target.

For Severn Trent there appears to have been a mistake as this graduated profile does not appear to have been applied as per the rules. This rule is summarised in the table below.

**Table 3 - Assessment approach and interventions on unplanned outage**

Performance Commitment	Calculated 'good' level	Historical data completeness	Intervention methods
Unplanned outage – a common performance commitment	2.34% - median level of 2024/25 forecasts	Only 2 years	An improving profile from 2020/21 to the median level of 2.34% in 2024/25

Despite the above rule, for Severn Trent the target has been set at 2.34% every year. This intervention appears to be inconsistent with the underlying rule and the position taken for a number of slow track companies. To ensure alignment with the above rule we believe the target should be set by reference to our 2020/21 target and on a straight line, deliver the “good level” by 2024/25, as illustrated below.

**Table 4 - AMP7 targets for unplanned outage (%)**

2020/21	2021/22	2022/23	2023/24	2024/25
4.00	3.59	3.17	2.76	2.34

## In conclusion

Overall we believe that the 2019 Price Review has been a very comprehensive and effective process that will help deliver the best outcome for customers. However as we have noted there remains two meaningful issues – WACC and Business Rates – which we believe need to be addressed to ensure a balanced package that is also fair in the round.

Alongside these points there are a small number of sector wider issues, notably supply interruptions and CRI, where we believe further progress can be made to help ensure a better position for customers today and in the future. We also have identified a very small number of issues where Severn Trent appears to be an outlier or an apparent mistake has been made – accordingly we would support further consideration of these points (SIM, mains repair and unplanned outages).

We are very appreciate of the constructive approach you have taken to this price review and given that our engagement in January included a large number of outstanding issues, it is a testament to the efforts of both teams and willingness to listen and focus on the key issues, accepting the package in the round, that we only have such a small list of outstanding issues at this stage in the price review process.

We look forward to discussing the remaining points with you and your team in September.

Yours sincerely,



**Liv Garfield**  
Chief Executive Officer