



Thames Water Response to the CMA Provisional Findings - PR19 Price Determinations

26 October 2020



Table of Contents

A	Introduction	2
B	Allowed Return	2
C	Cost Sharing Rates	3
D	Covid-19	3
E	Totex.....	4
	Botex modelling.....	4
	Enhancement modelling.....	4
F	Gearing Sharing Mechanism	5
G	Performance Commitments	5

List of figures:

Figure 1: – Comparison of Totex allowances between PR14 and PR19.....	6
---	---



A Introduction

1. Thames Water is the largest water and sewerage company regulated by Ofwat, serving around 6 million households in wastewater and around 3.8 million in water and operating around 32,000 km of water mains and 110,000 km of sewerage. We operate in the most densely populated area of England.
2. Whilst we are not one of the appealing companies in the CMA's review, we have an interest in the outcome as it is likely to have a material impact on the next price review (PR24).
3. We have appreciated the robust and open process that the CMA have followed and the encouragement for interested parties to be involved. We have been able to participate through both providing a submission in May 2020 and attending a hearing on 13 July 2020, where the CMA staff and panel members who attended were fully engaged and interested in our views. We also note the CMA have referred to our submission in several places in the Provisional Findings and so are pleased that our input has been helpful.
4. In this further submission, we provide comments on the Provisional Findings. These comments, which are consistent with our previous representations to the CMA and to Ofwat as part of the PR19 process, are provided to help the CMA in reaching its final decision and in aiming to achieve a successful outcome at PR24 for customers.
5. In this submission we provide comments on the following areas:
 - Allowed Return
 - Cost sharing rates
 - Covid-19 impacts
 - Totex modelling
 - Base cost modelling
 - Enhancement modelling
 - Gearing sharing mechanism
 - Performance commitments
6. We hope the CMA find this submission helpful and we are happy to provide any further information that you would find useful.

B Allowed Return

7. The CMA in their Provisional Findings have proposed an allowed return of 3.5% (real CPIH basis) to:
 - ensure that the allowed return is set at a sufficient level so that the sector remains attractive to investors over the long-term and so that capital is available for the necessary investments needed to cope with climate change, renew aging assets, improving resilience and the environment.
 - address the asymmetrical risk in the Final Determinations (FD).



8. While we did not comment directly in our submission to the CMA on the elements of the cost of capital, we did highlight a section from our FD acceptance letter¹ that the “*historically low WACC*” and other factors in the FD encouraged us to “*reduce rather than increase investment over the next five years*”.
9. We therefore agree that the allowed return should be set so that the sector is able to attract funding and is encouraged to increase investment to achieve more resilient networks, which is in customers’ long-term interests. We agree that the risks of setting the cost of capital too low, outweigh the risks of setting it too high and we consider that the CMA has found a good balance with robust methodological support behind the respective components of the allowed return.
10. We also support the CMA’s view that the asymmetrical risk built into the price review will result in the expected return being lower than the cost of capital (a point we made during PR19) and that this should therefore be compensated through a slightly higher allowed return.
11. We are therefore supportive of the CMA’s approach, which will provide greater confidence to investors to invest over the long term in the sector, which is in customers’ long-term interests, and will reduce disincentives for the appellant companies to invest in PR19. The Provisional Findings deliver a tough settlement but strike a better balance between current and future customers and sets a good framework for efficient investment in the future.

C Cost Sharing Rates

12. The CMA have highlighted that “*...the choice of cost-sharing rates needs also to provide effective incentives for cost efficiency. The widened range of sharing rates applied in PR19 will reduce companies’ incentives to outperform and will also expose companies to higher risks from underperformance. There may be circumstances where these asymmetric cost-sharing rates create unintended incentives...*”.²
13. Our penal cost sharing rate for over-expenditure was another aspect that we highlighted in our acceptance letter as being of real concern. This is a factor that serves to strongly encourage us to reduce rather than increase investment spend over the next five years.
14. We therefore support the CMA’s provisional conclusions.

D Covid-19

15. We note that the CMA have provisionally found that it is too early to be able to assess the full impacts of Covid-19 on the water sector due to the significant uncertainty regarding the timing, duration as well as scale of such impacts, and have noted that Ofwat are already considering this issue through a joint initiative with the industry. The CMA recognise that the industry is facing both short- and long-term challenges from the pandemic and have therefore proposed that Ofwat consider this issue for all companies as part of an industry-wide process. We agree that this is a sensible approach, providing the assessment is comprehensive, recognises that impacts may vary by company and that the impacts are on-going.

¹ We provided the full acceptance letter as an appendix in our submission.

² CMA Provisional Findings, para 6.115



16. The pandemic has so far had an adverse impact on companies overall and has added to the already asymmetrical balance of risk, recognised in the CMA's Provisional Findings, in the FD. This highlights that if the downsides on companies arising from the pandemic are not fully compensated, then there will be an even larger gap between the allowed return and the expected return, which may have an adverse impact on incentives to invest. As highlighted by the CMA in the Provisional Findings, the FD allowed return is not sufficient to reflect the risk inherent in the FD and therefore cannot be sufficient compensation for the additional Covid-19 risk, which continues to materialise, on top of existing FD risks.
17. We have been fully involved in the joint work with Ofwat, Water UK and water industry colleagues which has been considering the impact to date of the pandemic. We remain supportive of this but recognise that considerable further work is going to be required as we continue to understand and manage the full challenges of Covid-19 in the short and longer term as noted by the CMA.

E Totex

Botex modelling

18. We note the discussion regarding density in the Provisional Findings and the references to our earlier submission.
19. We welcome the CMA's provisional view of using flexible functional forms such as the use of squared terms on the water base plus cost econometric models (see p. 108, Provisional Findings report). This flexibility not only improves the statistical performance of the models on their adjusted R^2 and predictability power but also it recognises the wide range of density levels across the operating areas of the various companies in the water industry (see [Thames Water \(2020\), Thames Water Submission](#) to the CMA inquiry into PR19 Price Determinations, paragraphs 2.7-2.11). This result is in line with FD models providing reassurance on the objectivity of the base cost allowances and robustness of the models.
20. We support the CMA's Provisional Findings and are happy to provide any further evidence that maybe useful.

Enhancement modelling

21. We also note that the CMA have not sought to consider alternative models for enhancement expenditure, as yet. The challenging aspect of enhancement modelling is the irregular nature of the expenditure or the lumpy patterns observed across the industry on different types of enhancements activities in water and waste, within and between companies. We included analysis, for metering, with our earlier submission of alternative approaches that have the potential to improve the current static approach and which provide a better fit with the data.
22. The alternative approach we proposed in our earlier submission uses Dynamic Panel Data techniques. The nature of enhancement investments expressed as lumpy or irregular levels across the industry can be modelled using these types of techniques. This dynamic approach allows us to capture in a consistent way the different dynamic patterns (irregularities) of expenditures that each company faces at any particular period of time by introducing the lagged dependent variable that captures the historical and cyclical patterns of enhancement expenditures within a company. In our response, we provided an example on enhancement



metering with a full description of the analysis and results. For example, in this enhancement case the model assessed using the natural log has a poor predictability power suggesting that most of the outcomes could be underestimated (see Figure 5 in [Thames Water Submission to the CMA](#)). It is not only the R^2 that needs to be seen when evaluating the model performance. The prediction power of the model might be indicating some other underlying issues with the current approach and understating companies' enhancement expenditures. We hope these insights can be taken or explored in the current CMA assessment or in future price reviews as an alternative to improve the current approach (see [Thames Water Submission to the CMA](#) inquiry into PR19 Price Determinations, paragraphs 7.21-7.52).

23. We would encourage the CMA to consider this approach and reflect its views in its Final Determination and would be happy to provide any additional material that may be useful.

F Gearing Sharing Mechanism

24. We note that the CMA have provided robust views on the gearing outperformance sharing mechanism (GOSM) and its appropriateness to address the perceived harm identified by Ofwat. This has included concerns relating to *"...the effectiveness of a GOSM in improving financial resilience and the specifics of its design and, more fundamentally, whether the financial benefits of higher gearing assumed by Ofwat in its design of the GOSM exist"*.³ We agree with the CMA assessment, which goes to the heart of the policy choice made by Ofwat, and we made similar points during PR19.
25. While we appreciate that the CMA's mandate is to consider and make a redetermination relating to the four appellant companies, the GOSM is a policy instrument for the whole industry. To the extent that the CMA finds that Ofwat has been unable to prove the need and appropriateness of the GOSM to address specific financial resilience issues, and it proposes to remove the GOSM entirely for the appealing companies, we consider it would be appropriate for such removal to apply to the whole sector. We would therefore encourage the CMA to include a clear recommendation that the mechanism should not be applied in its current form to any company going forward.

G Performance Commitments

26. We note that the CMA have not made any material adjustment to the outcome framework, other than to compensate for its asymmetrical nature through changes to the allowed return. The CMA have supported Ofwat's view that increasing performance levels does not require any additional enhancement totex allowances, with the exception of leakage.
27. The CMA have undertaken analysis to show that over the first four years of AMP6, improvements were made to performance levels within the Totex allowances. While we do not consider that this analysis supports the conclusion drawn, we assume that the CMA will be updating the analysis to include the final year of the price control now it is available and we would encourage it to do so.

³ Provisional Findings, p32.

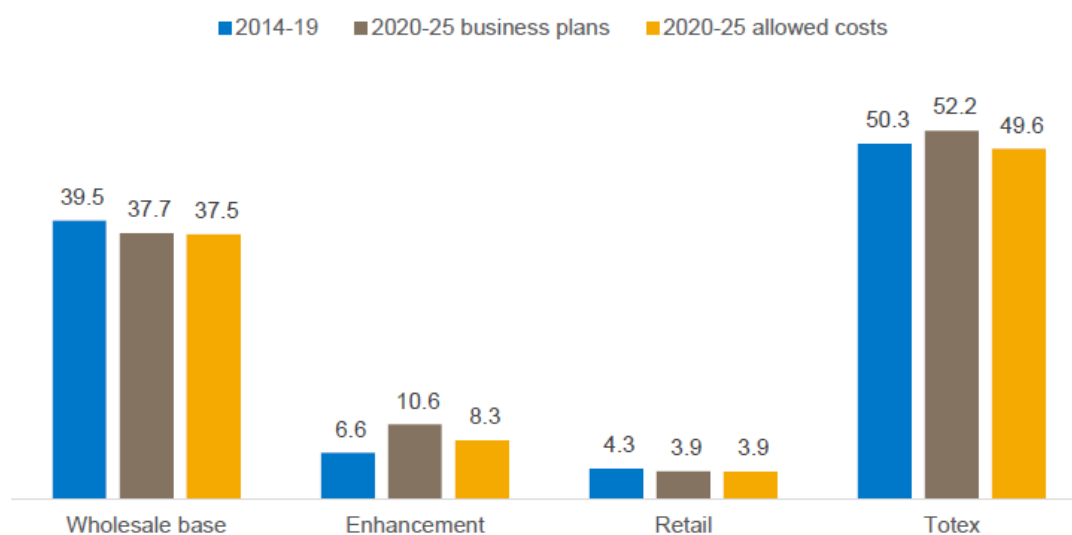


28. We consider that the CMA should consider two factors before drawing conclusions from this analysis:
- The PR19 cost allowances are lower than the costs incurred in meeting those performance commitments in AMP6; and
 - The performance commitments in PR19 are substantially more challenging than those achieved in AMP6.
29. Figure 1 below provides a comparison of PR19 cost allowances to historical cost from Ofwat's FD Policy Summary, which highlights the lower PR19 allowances on all areas apart from enhancement.

Figure 1: – Comparison of Totex allowances between PR14 and PR19

PR19 final determinations: Policy summary

Figure 8: Comparison of PR19 cost allowances to historical costs, £billion



Source: [Ofwat, PR19-final-determinations-Policy-summary.pdf](https://www.ofwat.gov.uk/PR19-final-determinations-Policy-summary.pdf), p44

30. As an illustration of the additional stretch in performance commitments, supply interruption and internal flooding are performance commitments with upper quartile targets set for all companies in Ofwat's FD. During the AMP6 period, the industry average performances have improved 26% and 21% respectively for these two measures⁴, and it will require a step change with a further 56% and 48% improvement respectively⁵ in AMP7 in order to achieve the PR19 targets.
31. So, in comparison to PR19, PR14 had less demanding performance requirements and a slightly higher Totex allowance. Achievement of the AMP6 performance commitments would therefore have naturally been easier to achieve within the PR14 Totex allowances. It does

⁴ AMP6 industry performance changes as per Discover Water industry data share

⁵ AMP7 required performance changes are based on APR 2019/20 shadow reporting, and the PR19 final determination



not appear logical to conclude that, as the targets could be achieved in AMP6, they can be achieved in AMP7 on a like-for-like basis without the need for additional enhancement allowances.

32. We accept that some performance improvement can be achieved through efficiencies and improved working practices and without the need for additional investment. We suggest that achieving significant improvement over and above previous levels, as highlighted above for supply interruptions and internal flooding is likely to require additional investment. This would be consistent with the CMA's provisional conclusion for leakage and it is notable that the percentage increase in performance for these two measures is greater than the percentage increase for leakage (e.g. a 20% improvement compared to a 15% improvement for leakage).
33. We therefore consider that the assessment of additional allowances to enhance performance should be considered on a case by case basis on its merits, taking into consideration the rate of performance improvement relative to historical levels. This is particularly important given that there is no clear link between performance levels and the cost models.