Southern Water: Response to Other Disputing Companies' Statements of Case

29th April 2025

from Southern Water

Introduction

1. This document provides Southern Water's response to the Statements of Case (SoCs) published by other Disputing Companies (DCs): Anglian Water (ANH), Northumbrian Water (NES), Wessex Water (WSX) and South East Water (SEW)). Thames Water (TMS) shared a draft of its third-party submission to the CMA, which we also comment upon. While TMS' status as a DC is uncertain, its submission features many positions that could form part of its SoC, should it be confirmed as a DC.
2. Our response is targeted to help the CMA with its redetermination process. We do not respond on all points raised by the other DCs nor repeat evidence already provided. Rather, we highlight specific areas that we hope will assist the CMA.
3. Across the SoCs there is generally strong alignment regarding the errors with Ofwat's FD. In particular: the WACC, the overall balance of risk, the level of challenge resulting from cost allowances, and the balance of incentives.
4. We acknowledge that our SoC is broad in scope and that, in general, the other DCs focus on a smaller range of issues. Nevertheless, each of the issues included in our SoC are material in their impact on the company, our customers and our environment. We therefore look to the CMA to address each of them in its redetermination, in accordance with its statutory duties and prior decisional practice.
5. Our response is structured in line with the main grounds of appeal as set out in our SoC submitted on 21 March 2025:
    1. Risk and financeability;
    2. Base costs;
    3. Enhancement;
    4. Treatment of uncertainty through mechanisms;
    5. Price control deliverables;
    6. Performance Commitments and Outcome Delivery Incentives;
    7. WACC; and
    8. Conclusions.

1. Risk and financeability

6. The DCs' views on the issues of risk and financeability are closely aligned and each stresses the importance of the CMA correcting these issues in its redetermination.
7. We agree with ANH, NES and SEW that the FD does not represent a 'fair bet' for investors and similarly seek remedies to mitigate excessive risk. Some common remedies are proposed, including the removal of the outturn adjustment mechanism (OAM) deadband and ensuring any residual risk is captured in the cost of equity. We also agree with WSX that there is a significant downside skew in the risk ranges.
8. We agree with ANH, NES, SEW that the FD is not financeable and not investable for the notional company, especially one mandated to fund and deliver a relatively large growth investment programme. Along with ANH and SEW, we utilised the results of the risk analysis to inform downside financeability testing, which we agree is the most appropriate approach.

9. We agree with SEW's position that, to support financeability, the aggregate sharing mechanisms (ASM) should be adjusted to include: i) tighter thresholds; ii) an upper threshold with 90% sharing on wholesale totex; and iii) implicitly, given SEW is a water-only company (WoC), that the Totex ASM should be applied to each of water and wastewater individually to ensure that WoCs are not treated differently to water and sewerage companies (WaSCs).
10. Regarding long-term financeability, we support ANH's position that the notional company's ability to issue dividends is severely limited, potentially for multiple AMPs. This underscores the point that the FD is not sustainable.
11. Along with ANH and SEW, we agree that Ofwat committed an error by not considering company-specific characteristics sufficiently in calibrating the FD, specifically characteristics outside of management control and expected to impact a notional company. These characteristics should be considered when calibrating the FD in order to meet the requirements of Ofwat's financing duty.
12. Addressing errors in the assessment of costs identified in the FD, as well recalibrating the ODI incentive package to capture regional factors and reflect achievable targets, are key remedies needed to address risk at source. Agreement among DCs on the impact of these company-specific characteristics on risk underscores the importance of capturing these characteristics in calibrating the redetermination.
13. The notional company risk analyses demonstrate the impact of not considering these factors and how they can drive an imbalance of risk and return – including expected penalties for a P50 performance and in some cases contributing to excessive downside risk. Some examples of company-specific characteristics include: i) ANH's wastewater network distribution by asset type; ii) SEW's operational headroom and network configuration; and iii) the material proportion of protected habitats in our region. These analyses highlight the need for the CMA's redetermination to capture these company-specific characteristics to provide a balanced package of risk and return in line with Ofwat's financing duty.

2. Base costs

14. Our SoC explained how Ofwat's approach to base cost assessment has led to underfunding across the industry[1].
15. It is clear from the other SoCs that this concern is shared by other DCs. ANH sets out that: *"Base cost allowances are stretched implausibly thin in the FD and are insufficient to finance ANH's required activities in PR24.[2]"* NES explains that: *"we have significant concerns with Ofwat's overall framework for cost assessment in FD24 and consider that it underfunds an appropriate level of investment in asset risk management and operational resilience amongst other issues.[3]"* SEW states that: *"Ofwat's methodology*

[1] Southern Water, Statement of Case, p112 -113
[2] ANH Statement of Case'. ANH (March 2025); page 52
[3] NES Limited, Statement of Case'. NES (March 2025); page 8

is technically flawed, too generic and its application results in unwarranted underfunding of efficient and necessary costs.[4]" Finally, WSX is clear that: *"a necessary but not sufficient condition for the regulator to meet its Duties is to ensure that the efficient company has sufficient allowances to deliver its ongoing core services (i.e. base activities) in a manner that ensures long-term resilience of these assets. Ofwat's Final Determination does not achieve this.*[5]"

16. The remedies that we present in our SoC go some way to addressing these common concerns with the base cost allowance. The issues we raise are evidently significant for us and we are seeking over £650m[6] of additional allowance through our requested material remedies. While NES argue in its SoC that the CMA should take a targeted approach and not make changes to the base cost models[7], this approach would mean that the material issues we have raised would not be addressed. That would not be consistent with the CMA's statutory duties or prior decisional practice.

17. A further point raised in our SoC related to how Ofwat erred in its application of the Cost Adjustment Claim framework, which should be a crucial aspect of the assessment to account for company-specific factors. Other DCs have also raised challenges to Ofwat's rejection of CACs. NES explains how: "*the CAC process was unduly restrictive, including the criteria for assessment and the high evidential burden for Ofwat to accept claims. This meant that it was very difficult for the cost adjustment claim process to mitigate these issues*"[8].

2.1 Asset health - Ofwat's approach to capital maintenance based on historical spend levels is not fit-for-purpose

18. Most of the other DCs clearly highlight, as we did,[9] that Ofwat's approach to funding asset health is not appropriate for AMP8. Allowances based primarily on historical models will underfund capital maintenance, thereby leading to a deterioration of asset health.

19. WSX argues that: *"the regulatory model does not provide adequate allowances for companies to invest in the long-term resilience of their assets"*[10]. NES set out that: *"Ofwat failed to adopt an approach to the assessment of the efficient levels of base costs for capital maintenance and asset risk management in AMP8 that is adequate"*.[11] and ANH: *"considers that a "step-change in the approach to asset maintenance*[12]*"* is needed.

20. This commonality of views among DCs supports our concern that while Ofwat has now initiated a process to understand more about asset health across the industry and intends to develop its thinking in this area, the mechanism to make any subsequent change is unclear and uncertain. Therefore, we need the CMA to address this as part of its redetermination, by providing a remedy and establishing a clear mechanism to allow

[4] SEW, Statement of Case, p33
[5] WSX Statement of Case'. WSX (March 2025); page 38
[6] This is the summation of our requested amounts of additional modelled allowances from the eight base cost remedies.
[7] NES Limited, Statement of Case'. NES (March 2025); page 8
[8] NES Limited, Statement of Case'. NES (March 2025); page 69
[9] Southern Water, Statement of Case, p200 - 212
[10] WSX Statement of Case'. WSX (March 2025); page 5.
[11] NES Limited, Statement of Case'. NES (March 2025); page 68.
[12] ANH Statement of Case'. ANH (March 2025); page 20.

companies to fund asset health. In our SoC, we described how a gated allowance mechanism could work for asset health funding,[13] and we note that ANH has proposed a "use-it-or-lose-it" mechanism as an alternative funding route for asset health within its SoC[14] which demonstrates this is a sector wide issue.

21. Although there is a broad consensus on the shortcomings in Ofwat's approach to asset health, we note that the DCs present different options for remedying this. While we stand by the proposed remedy in our SoC, we also think there is potential merit in approaches presented by other DCs and are investigating whether similar analysis can be developed for Southern Water and would be happy to engage with the CMA on this if it considers one of these alternative approaches to be more appropriate. We also note the commonality between the specific mechanisms proposed by ANH and ourselves, which both aim to ensure that bill-payers only pay for asset health funding that is actually invested.

2.2 Ofwat's frontier shift assumption is overly optimistic

22. In line with Southern Water[15], all the DCs highlight that Ofwat's 1% Frontier Shift assumption is over-optimistic and should be reduced to a more realistic level. SEW and WSX support our proposal to apply a 0.5% Frontier Shift, which is in line with the mid-point of the range presented by Economic Insight – in its report commissioned by all DCs.
23. While NES and ANH propose a Frontier Shift to 0.8%, it is important to note that this is outside the 0.3% – 0.7% range presented in Economic Insight's expert report, referenced in all five SoCs. It is not clear why these two DCs consider a Frontier Shift of 0.8% to be the appropriate remedy based on the contentions in their SoCs. Therefore, if the CMA accepts the DC's common view that Ofwat's proposed 1% Frontier Shift is not justifiable, the appropriate remedy is to reduce this to 0.5%.
24. In our SoC, we explain that the FD includes double-counting of efficiency challenges for enhancement costs.[16] We note that ANH has provided further detail of this risk specifically in relation to the new infrastructure construction output process index (COPI) which is an output measure and therefore double-counts the frontier shift.[17]

2.3 Water Econometric Modelling: Inclusion of Connected Properties as a scale explanatory variable

25. SEW argues that Ofwat's treated water distribution (TWD) models do not sufficiently account for costs associated with population growth. In the accompanying expert report, Oxera argues that connected properties would be a more viable driver to explain these differences[18].

[13] Southern Water, Statement of Case, p212
[14] ANH Statement of Case'. ANH (March 2025); page 94.
[15] Southern Water, Statement of Case, p179 - 189
[16] Southern Water, Statement of Case, p187-188
[17] ANH Statement of Case'. ANH (March 2025); page 108.
[18] Oxera, Wholesale base expenditure modelling - Prepared for SEW, 14 March 2025, p30

26. Ofwat's reasoning for not including the connected properties variable is that: *"connected properties is highly correlated with length of mains (more than 90%), which means the inclusion of connected properties instead of length of mains in the TWD models has an immaterial impact on allowances[19]."*

27. We have assessed the following evidence presented by Oxera to support SEW's case for including the connected properties variable within the modelling suite and support the position taken by SEW to triangulate with connected properties as an additional scale explanatory variable for the following reasons:

- **The connected properties driver better captures forecasted increases in UK population growth for AMP8:** The UK population is expected to grow by c.1.6m between 2027 and 2032. The connected properties cost driver is better able – as compared to the network length driver - to capture the additional base costs that will arise from such population growth. Oxera presents quantitative evidence that population growth is forecast to outpace network length at the total industry level in AMP8[20]. Further, this evidence shows a higher correlation – as compared to mains length – between connected properties and network reinforcement expenditure[21].
- **The connected properties driver performs well as a scale driver within TWD models:** Oxera contends that the connected properties driver achieves high statistical significance in TWD models while the overall explanatory power of the models remains high. We find that the connected properties driver achieves statistical significance at the 1% level in all model specifications. Further, the models continue to perform well across all the Ofwat model robustness tests[22].
- **Using connected properties as the scale driver in TWD models results in a material impact on modelled base allowances:** Oxera shows that using connected properties as a driver leads to a material impact for many companies based on Ofwat's own materiality threshold of 1%[23]. Further, our analysis shows that triangulating between connected properties and length of mains increases wholesale water allowances across the sector by over £200m, when compared to the specification of the water models set out in the remedy for Error 2 of our SoC. Southern Water's allowance would increase by £9m[24].
- **It is possible to triangulate between models with correlated variables:** Oxera rightly points out that Ofwat triangulated between other models that are even more correlated than length of mains and connected properties[25]. While the two scale variables are correlated, this does not lead to a multicollinearity error when triangulating between different models with the variables included separately, as proposed by SEW. Therefore, Ofwat's reasoning for excluding connected properties based on this correlation is not compelling.

[19] Ofwat, Expenditure allowances – base cost modelling decision appendix, December 2024, p19
[20] Oxera, Wholesale base expenditure modelling - Prepared for SEW, 14 March 2025, p9
[21] Oxera, Wholesale base expenditure modelling - Prepared for SEW, 14 March 2025, p30
[22] Southern Water analysis
[23] This is the threshold used by Ofwat for accepting Cost Adjustment Claims.
[24] Southern Water analysis based on using BPS as the only network topography explanatory variable in water econometric models and comparing between option of triangulating between connected properties and length of mains as scale explanatory variables or the option of just using length of mains as the only scale explanatory variable in the TWD econometric models.
[25] Oxera, Wholesale base expenditure modelling - Prepared for SEW, 14 March 2025, p31

28. Overall, SEW and Oxera present compelling evidence on both the underlying rationale and strong statistical performance when using connected properties as the scale driver within TWD models. This evidence clearly responds to the reasons given by Ofwat at FD for not including the variable. Therefore, we support the CMA accepting SEW's proposed remedy to include connected properties as an additional scale explanatory variable in the TWD models and triangulating between models with that variables and alternative models with the length of mains variable included.

2.4 Water Econometric Modelling: Inclusion of Average pumping head (APH) and Booster Pumping Station (BPS) to explain network topography

29. At PR24, Ofwat triangulated between two variables within its wholesale water models to explain network topography. SEW argues that bringing these two variables into the same model corrects for omitted variable bias and improves the statistical quality of the models.[26] It argues for this specification of the wholesale water models rather than Ofwat's current triangulation approach.
30. In our SoC,[27] we set out our argument that APH should not be included as a network topography explanatory variable.
31. It is clear from reviewing all the DCs' SoCs that there are three potential options to account for network topography within the water econometric models:
    i. Ofwat's FD approach of triangulating between APH and BPS explanatory variables in separate models;
    ii. SEW's remedy of including APH and BPS variables in the same model; and
    iii. Southern Water's proposed remedy of using only BPS as an explanatory variable.
32. The concerns we set out in our SoC regarding data quality act as a bar to using APH as a variable in any form. APH fails Ofwat's first modelling principle, which relates to data being of good quality. This principle would be failed if APH were included either as part of the triangulation proposed by Ofwat (option i) or as one of two variables in a single model, as proposed by SEW (option ii). For this reason, the only viable option is the proposed remedy in our SoC (option iii).
33. There may be merit in the econometric arguments presented by SEW for bringing the explanatory variables into the same model. However, as we explained in our SoC this is a secondary consideration. Any consideration of potential modelling specifications would only arise if the APH data is of good quality. , This is not the case, for the reasons we set out in our SoC.[28]
34. In addition to points above, TMS's third party submission to the CMA recommends a triangulation between APH and a new alternative variable "Booster Pumping Capacity". We do not support this approach as this variable was already considered by Ofwat at

[26] SEW, Statement of Case, p38
[27] Southern Water, Statement of Case, p122- 131
[28] Southern Water, Statement of Case, p129

the start of the PR24 consultative process but quickly discounted[29]. There is no new reasoning for exchanging BPS – a variable that passes Ofwat's modelling criteria and one the CMA ratified as the sole explanatory variable at the PR19 redetermination – for a new less-tested variable. This is especially true given Ofwat and the CMA have both already responded to concerns raised by TMS for using the BPS variable[30].

2.5 Wastewater Econometric Modelling: Inclusion of "Load treated in size bands 1 to 3 (%)"

35. TMS argues for the continued triangulation with the discrete bands 1-3 variable as a threshold variable to help capture non-linearities which they argue are not captured by WATS. TMS does not provide any evidence to show the functional form of the model with the WATS variable fails to capture this aspect. In fact, the WATS variable already captures the full complexities of the relationship between scale and average costs. The WATS variable is defined to implicitly capture non-linearities present in economies of scale. This specific issue was addressed by United Utilities in its response to Ofwat's 2023 consultation on base cost models[31].
36. Ofwat includes the RESET test as a model robustness test to detect if an alternative functional form may be superior, through missing non-linear terms (e.g. quadratic)[32]. The SWT2 model with the WATS variable included strongly passes this test which indicates that the functional form is appropriate.
37. In its PR24 draft determination, Ofwat rejected the arguments presented by TWS related to limitations of the WATS variable.[33] For these reasons, the CMA should not consider TMS' arguments as relevant reasons for continuing to use the inferior discrete bands 1-3 variable.

2.6 Cost pass-through for Ofwat's licence fees and EA levies

38. NES argues that the CMA should allow a 100% pass-through for the increase in Ofwat's licence fee in AMP8.[34] This would be in line with the treatment of Ofgem's licence fee in energy companies' price determinations. NES explains that Ofwat has rejected this proposal in the PR24 process, arguing that the costs do not vary much year-on-year and that water companies can influence these costs.
39. NES explains in its SoC how both its licence fee and Ofwat's overall budget has increased significantly in recent years. It also explained that it has been unable to influence these costs, despite representations made around Ofwat's budget. We also have no ability to negotiate lower fees with Ofwat[35] [36].

[29] Ofwat, Econometric base cost models for PR24, April 2023, p24
[30] CMA, March 2021, ANH Services Limited, Bristol Water plc, NES Limited and YWS Limited price determinations, pages 141-142
[31] UUW response - Consultation on econometric base cost models for PR24, April 2023, pages 16-17
[32] Ofwat, December 2024, PR24 FD: Expenditure allowances – base cost modelling decision appendix, page 62
[33] Ofwat, July 2024, PR24 DD: Expenditure allowances – Base cost modelling decision appendix, page 36
[34] NES, SoC, p124
[35] In our DD response, we noted that it was likely Ofwat would increase its licence fee, and we argued for a pass-through of these costs.
[36] Southern Water, DDR, p73

40. We request that the CMA provides a 100% cost pass through of licence fee costs to ensure we are compensated for the increase in Ofwat's licence fee. Given Ofwat costs are shared between companies based on their respective size, we expect a similar impact for us as NES.. We have not sought to replicate the quantification provided by NES but request the CMA asks Ofwat for its latest forecast of the additional licence fee costs for all DCs in AMP8.
41. NES also noted in its SoC that the EA has proposed to impose a new water industry levy on the sector. This is a new levy that introduces costs which have not been imposed previously and therefore are not captured in the historical base cost modelling data used by Ofwat in the FD.
42. On 14th April, the EA published its consultation on the water industry enforcement levy.[37] The EA has also shared with Southern Water separately additional detail on the costs that would be imposed on Southern Water based on the number of relevant permits held: this represents an additional annual levy of £1.5m.[38]
43. On 16th April, the EA published a further consultation related to plans to increase permitting charges to cover increased EA staff costs arising from, amongst other things, an increase in employers' National Insurance Contributions (NICs)[39]. These one-off increases of charges will apply from April 2025 and we estimate will lead to additional charges for Southern Water of £1.4m per annum[40].
44. We request that the CMA redetermines our ex-ante allowances for these items and provides a 100% ex post cost-pass through of Ofwat and EA levies.

2.7 National Insurance contributions (NICs)

45. In its SoC, ANH notes that the ex-post true-up on labour unit costs will not capture the additional costs from the increase to employers' NICs[41]. There is merit in ANH's arguments, and it is correct that these additional costs will not be captured through the Ofwat true-up mechanism.
46. Ofwat's arguments for not adjusting for the NIC increase due to the uncertainty of final impacts are weak[42]. Ofwat's failure to account for labour cost dynamics is already evident through the cost adjustment claims we have submitted to account for the higher regional wage levels we face in the South East. While NICs form a non-wage element of labour costs, it forms a non-controllable cost directly related to the number of people we employ directly and through our supply chain; water companies will incur the increased costs following the government policy change. It is a legitimate AMP8 expense that should be recovered.

[37] See Environment Agency charges consultation: Water industry enforcement levy - Environment Agency - Citizen Space
[38] Environment Agency, Water (Special Measures) Act 2025 - April '25 Water Industry Enforcement levy consultation supporting material - Pack produced for: Southern Water, 15 April 2025.
[39] See Environment Agency charge proposal: cost of service - Page 1 of 7 - Environment Agency - Citizen Space
[40] Southern Water analysis
[41] ANH Statement of Case'. ANH (March 2025); page 108
[42] Ofwat, December 2024, PR24 FD: Expenditure allowances – base cost modelling decision appendix, page 30

47. Ofwat has failed to provide any evidence in their response on why the NIC rate increase should not be recoverable by companies. Further, this is at odds with the financing duty and ensuring the AMP represents a fair bet, given Ofwat is implying that uncertain sources of outperformance form adequate justification to underfund known uncontrollable costs.

48. We ask the CMA to review the Water UK estimates of additional costs companies face due to NICs and provide an additional allowance to Southern Water.

3. Enhancement costs

3.1 Positions in other companies' SoCs that support our case

49. Many of the points other DCs raise regarding enhancements and Ofwat's approach to enhancement cost assessment are similar to those in our SoC. We show in **Error! R eference source not found.**Table 1 below that the specific errors we are asking the CMA to remedy are similar in nature to those raised in the other companies' SoCs. The common themes demonstrate that there are errors in Ofwat's approach to enhancement cost assessment, which we ask the CMA to address as part of the redetermination.

Table 1: Alignment of enhancement concerns by other DCs

	Error 1: Use of poorly performing benchmarking models	Error 2: Arbitrary top-down challenges in deep dive/shallow dive assessments	Error 3: Incorrect assumption of overlap with base or previous funding
ANH			• Mains renewal: level of activity within base cost allowance.
NES		• Resilience enhancement (Climate change) • Shallow dive challenge errors	• Mains renewal: level of activity within base cost allowance. • Asset health improvements for civil structures and service reservoirs
SEW	• Raw water deterioration • Leakage	• Water WINEP • Lead reduction • Raw water deterioration • Cyber security • Leakage • Selected resilience enhancement schemes	• Mains renewal: level of activity within base cost allowance. • Net zero • Resilience enhancement base overlap • Previous funding of resilience enhancement
WSX	• P removal		• Mains renewal: level of activity within base cost allowance.
SWS	**• IED • Supply interconnectors**	**• Flow monitoring • Emergency overflow monitoring • Shallow dive**	**• Mains renewal: level of activity within base cost allowance • Resilience enhancement base overlap • Previous funding of supply scheme**

3.2 Base overlap errors for mains renewals

50. As with our SoC, ANH,[43] NES,[44] SEW,[45] and WSX[46] all disagree with Ofwat's estimate of mains renewal activity implicitly funded through base costs (0.3% of total mains length p.a.). This estimate was calculated by reference to a single methodology.

51. Ofwat's estimate had a material impact in reducing cost allowances granted in the FD. The five DCs saw a total reduction of £222 million across both base cost adjustment claims and leakage enhancement claims through Ofwat's approach to mains renewal. In their SoCs, a number of other DCs used different approaches to Ofwat to calculate an alternative implicit level of mains renewals activity. Our SoC also set out a variety of approaches to calculating the implicit level and presented a central estimate (of 0.17% p.a.). The variety of implicit mains renewals activity levels other companies estimate supports our point that a range of approaches can be taken and that using a single approach (as Ofwat did) was inappropriate.

52. The DCs that propose alternative approaches to calculating an implicit level of activity typically use a range of approaches (as we did), often focusing on the last five-year period and using similar weighted-average calculations as we used in our SoC.

53. NES applied two techniques that are different to those we used:

    1) **Historical mains renewal rates over the last five years.** NES compares the renewal rates of companies categorised by their base efficiency scores, using the whole historical data period and the last 5 years. The findings show that within both the most efficient and least efficient groups of companies, the full historical period results in a higher renewal rate than using the 5-year period.
    2) **Excluding historical expenditure from the models.** There may be merit in this approach which takes an Ofwat-described route of excluding the historical costs from the expenditure and re-estimating modelled allowances, with the differences indicating a £m implicit allowance that can be worked back to a km of main rate. However, we been unable to replicate NES's results without more information regarding the models they used to make their estimate.

54. In its accompanying data to its SoC, WSX demonstrates that the level of renewal activity undertaken by the industry before the Totex and Outcomes regime was implemented in 2015 was 0.61% p.a. and the level since then has been 0.22% p.a.[47].

55. Following our review of WSX's data, we explored the impact of the Totex and Outcomes regime on mains renewal rates, expenditure and performance, as shown in Figure 1 and Figure 2. Over the period 2011-12 to 2023-24, this indicates that:

    - base expenditure in treated water distribution has an increasing trend;
    - mains renewal rates have a declining trend; and

[43] ANH, March 2025, SoC, p.58, paragraph 219
[44] NES, March 2025, SoC p.99, paragraph 350
[45] SEW, March 2025, SoC, p.40, paragraph 4.29 (a)
[46] WSX, March 2025, SoC, p.52, paragraph 8.40 (b)
[47] WSX, March 2025, A296 – Economic Insight – March 2025- Supporting files – Water mains renewal rates – 17.03.25.xlsx

- the total number of mains bursts (for the companies where we have data for all years)[48] has been stable.

56. These trends indicate that companies have continued to invest in their networks, including in alternative methods to mains renewal, such as active pressure management and mains re-lining, which have been successful at maintaining burst performance. Burst rates is one of the key metrics Ofwat has used over many years as an indicator of asset health. It is not clear if Ofwat considered the potential impact on performance from requiring companies to use a considerable proportion of their base funding for mains renewals in the 2025-30 period, thus diverting funding from activity such as pressure management, with the risk that burst rates may increase in the short term.

Figure 1: Industry mains renewals and number of mains bursts per km of main 2012-24

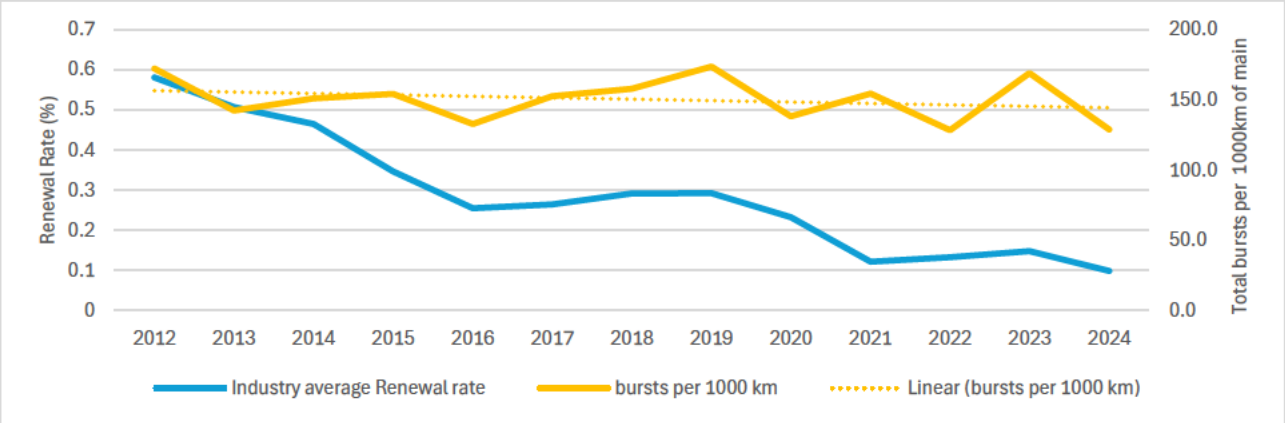
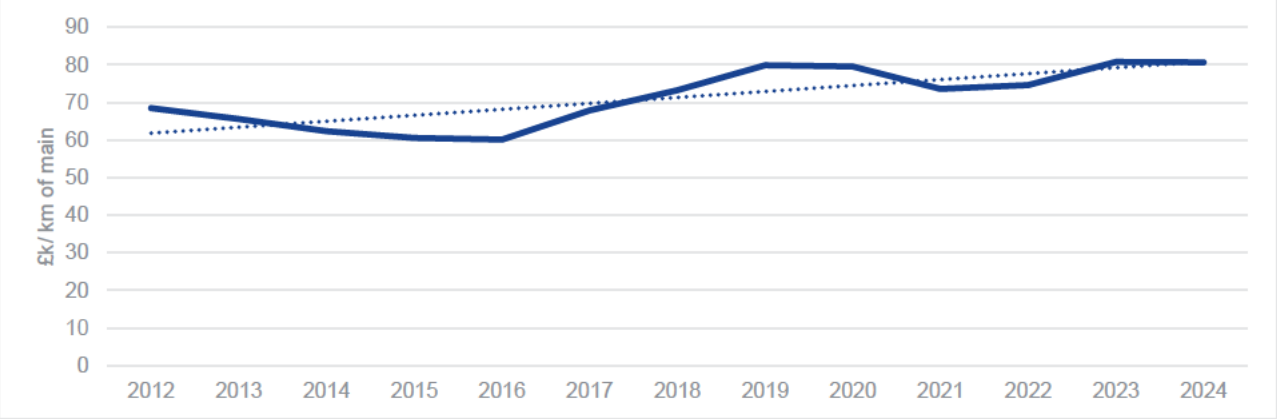


Figure 2: Treated water distribution base expenditure 2012-24: Industry total



57. Table 4 sets out the level of renewal implicit in the base cost allowance proposed by the other DCs:

Table 2: Level of mains renewal implicit in the base cost allowance

Company	Level of mains renewal implicit in the base cost allowance
ANH	0.2% p.a.
NES	No higher than 0.15% p.a.

[48] Ofwat's data in tab "FD_Input_final_data" for total mains repairs in it FD model: https://www.ofwat.gov.uk/wp-content/uploads/2024/12/PR24-FD-CA13-Repairs-to-burst-mains.xlsx does not include data points in all years for Affinity Water or South Staffs Water. These companies account for 7% of industry total mains length.

SEW	c. 0.15% p.a.
WSX	None given
Southern Water	**0.17% p.a.**

58. Our calculations concluded that a level of 0.17% p.a. was a balanced and appropriate estimate, taking into account a multi-faceted range of approaches. This value is supported in the round by the cases made by the other DCs. **We recommend the CMA uses the conclusion from our SoC in setting an implicit level of mains renewal funded in the base cost allowance.**

3.3 WSX's phosphorus removal case

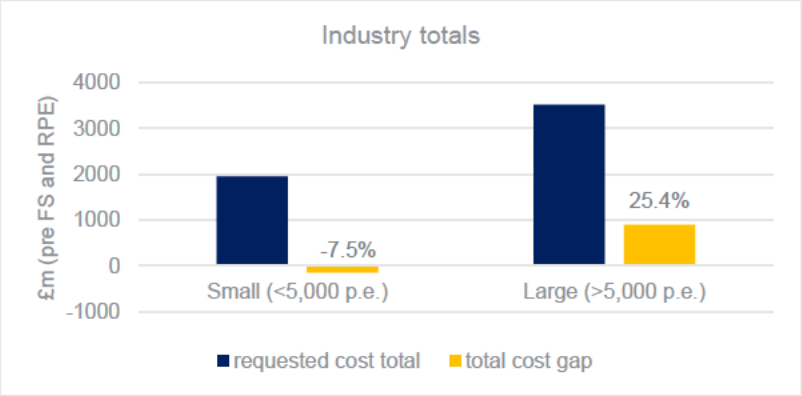
59. WSX makes similar points to ours for IED and supply interconnectors, namely that Ofwat's FD enhancement models are not robust. It points out the low R-squared for the phosphorus (P) removal model, which indicates there are material variations in cost that are not explained by the model's drivers. The P removal model provides another example where Ofwat's cost assessment approach has failed to account for company-specific factors affecting costs.

60. As Ofwat's FD allowance for P removal resulted in an allowance for our schemes that was appropriate, we are not asking the CMA to redetermine it. However, we endorse the points WSX makes about the modelling approach being insufficiently robust to rely on to make a cost allowance for such a material area of investment.

61. We have investigated the FD modelling in the way described by WSX, looking separately at the difference between requested and allowed costs for sites sized above and below 5,000 population equivalent (p.e.). For shorthand, we have called these large and small sites respectively. We found the following:

- In agreement with WSX, we observe there is a systematic issue with Ofwat's FD approach that challenged P removal requested costs at large sites by a higher proportion than for small sites. This is illustrated in Figure 3 below which shows the higher percentage challenge for large sites compared to small sites for the industry.
- We have calculated that if the CMA carried out a deep dive and allowed our requested costs rather than Ofwat's FD approach for all of our 26 large sites >5,000 p.e., we would gain an addition to our cost allowance of £2m. This is not material, which is why we consider a redetermination for us in this area is unnecessary.

Figure 3: P removal FD modelled allowance (before outlier analysis) and gap (% of requested)



62. In summary, if the CMA is going to redetermine P removal allowances on the basis of WSX's SoC, we request that the CMA redetermines the cost allowance for large schemes only (>5,000 p.e.) by considering the bottom-up evidence that supports the efficient costs for the schemes.

3.4 Ofwat's arbitrary adjustments and incorrect base overlap

63. Other DCs underline the significance of the points we raise in our SoC related to the arbitrary adjustments Ofwat made in its enhancement cost assessment approaches.

64. One of these is the arbitrary nature of the shallow-dive company-specific efficiency challenge, which NES raises related to errors within Ofwat's calculations.[49] As shown in Table 1 above, SEW also notes that for a number of its enhancement cases, Ofwat applied an arbitrary efficiency challenge through deep-dive or shallow-dive assessments. Further, as we raised in our SoC, other DCs' SoCs illustrate enhancement cost assessment errors are systemic problems that impact all companies.

4. Treatment of uncertainty through mechanisms

4.1 Boundary boxes

65. We note that ANH is seeking a cost adjustment claim for boundary box costs. In our SoC, we requested an uncertainty mechanism to cover such costs.

66. We agree with ANH that companies that had early roll-out of metering programmes will face material costs in AMP8. Our work on replacement volumes (a pilot survey and benchmarking with other companies) suggests that there is material uncertainty on the volumes that need to be replaced. Therefore, we consider an appropriate approach for Southern Water is to have an uncertainty mechanism.

67. We note that both our and ANH's estimates of boundary box unit rate costs are closely aligned (ANH's estimate is £649/unit, ours is £634/unit). This supports our estimate of the unit cost; it is the volume of replacements that remains uncertain, and therefore in need of an uncertainty mechanism.

[49] NES, March 2025, SoC p.21, paragraph 132.

4.2 New health and safety requirements

68. We note that WSX' presents a heavily redacted case for an additional £178 million for bioresources health and safety requirements following the Health and Safety Executive (HSE) investigation into the tragic incident in 2020 at Avonmouth.

69. It is likely any new HSE requirements would be applied across the sector, and we would want to respond as soon as practicable to the findings of the HSE investigation when it is published and protect the health and safety of our operational staff. Therefore, we consider it may be appropriate for the CMA to set a notified item for all DCs relating to any new health and safety requirements and/or recommendations.

70. We propose some draft wording for such a notified item for discussion:

> *Any increase in costs in the period from 1 April 2025 that is reasonably attributable to any new or changed legal requirement, or guidance issued by the HSE, in relation to health and safety at bioresources sites.*

5. Price control deliverables

71. We and the other DCs have concerns with Ofwat's FD PCD framework which include:
    - Base PCDs are restrictive and unreasonably ring-fence base cost allowances[50];
    - The PCD framework provides asymmetric risk[51];
    - The PCD framework is inflexible[52]; and
    - The PCD framework overlaps and duplicates other mechanisms[53].

72. In addition, other DCs raised concerns regarding the specification of individual PCDs on which we did not comment on in our SoC, namely:
    i) **Lead replacement:** ANH comments that the PCD specification may create unintended consequences. The specification does not allow for risk-based prioritisation of expenditure which may in turn not deliver the most optimal [public] health outcomes. NES highlighted that the PCD lacks flexibility to over-deliver on some elements and under deliver on others. **We agree with the other DCs' positions on this PCD.**
    ii) **Smart metering:** ANH requests that this PCD be simplified to count meters installed (i.e. there should be no distinction between household and non-household meters. Ofwat makes no distinction between these in its cost modelling approach. **We agree with the ANH position.**

73. Our SoC proposed an alternative PCD framework that seeks to address many of the issues with the Ofwat PCD FD framework (e.g. aligning PCD delivery dates with prescribed EA and DWI delivery dates) including those raised by the other DCs. Our SoC is unique in proposing an alternative PCD framework that provides a

[50] WSX, SOC, p52. NES, SOC, p66
[51] ANH, SOC, p159
[52] ANH, SOC, p163. SEW, SOC, p6
[53] WSX, SOC, p162

comprehensive and workable alternative to the Ofwat FD framework. We have seen nothing in the other SoCs that casts doubt on the effectiveness of our alternative PCD framework; indeed, our alternative PCD framework would also remedy the concerns raised by the other DCs.

74. The CMA should adopt our alternative PCD framework in its redetermination which would address the overarching concerns raised by all other DCs.

6. Performance Commitments (PCs) and Outcome Delivery Incentives (ODIs)

75. We and the other DCs recognise the FD is not a 'fair bet' and there is excessive downside skew. ANH states "*the FD is also wrong that it provides a fair bet for investors. This misrepresents the level and negative skew of risk exposure*".[54]

76. NES provides additional evidence "*which suggests Ofwat's risk analysis is likely to have underestimated the extent of the downward bias in the outcomes package*"[55] and WSX recognises that "*some targets have been set at a level that makes underperformance more likely than outperformance for an efficient company*".[56] All DCs recognise there is a fundamental issue with the calibration of the outcomes package.

77. We agree with DCs that the Outturn Adjustment Mechanism (OAM) and Aggregate Sharing Mechanism (ASM) are part of the solution that will help solve this skew and achieve a more balanced package. We, along with three other DCs (ANH[57], NES[58] and SEW[59]), agree that the +/-50bps deadband should be removed from the OAM mechanism. WSX acknowledges that the OAM only "*partly mitigates*" the impact of methodological flaws on the overall balance of risk and return but "*does not address the fundamental source of these issues*"[60]. SEW also requests to tighten the ASM thresholds to +-2% "*lower*" threshold at 50% sharing and +/-3% "*upper*" threshold at 90% sharing, we support this argument. SEW – as a WOC – also implicitly supports our SoC that the Totex ASM should be considered separately for Water and Waste-water to avoid a distortion between WOCs and WASCs.

78. There is a recognition among all DCs that the PCs/ODIs package is mis-calibrated due to a combination of overly stretching targets and punitive ODI rates. The FD does not provide a 'fair bet' for investors given the level of risk and downside skew. DCs recognise the need to correct this, whether at source or through risk mechanisms.

79. Common themes that some DCs have raised on Ofwat's FD PCs/ODIs package addressing risk issues at source include:

- Water supply interruptions (WSI) target level;
- WSI collar level;

[54] ANH SoC, p173
[55] NES SoC, p148
[56] WSX SoC p160
[57] ANH SoC, p152
[58] NES SoC, p148
[59] SEW SoC, p90
[60] WSX SoC, p161

- Total pollutions target level and ODI rate;
- C-Mex target level; and
- Measures of Experience (MeXes) incentive rates.

80. Along with the common themes identified above, we provide in our SoC a series of additional remedies that target risk at source. These include specific remedies to either align the Performance Commitment Levels (PCLs) to a fairer bet or amend risk mitigation measures for Compliance Risk Index (CRI), Storm Overflows, Serious Pollution Incidents along with targeted collars (for Leakage, Water Quality Contacts, Discharge Permit Compliance and Bathing Water Quality), to support a calibration correction.

81. ANH and SEW identify the need to change the target level for WSI. ANH and SEW supports the use of the latest available data and sees no good reason for the inconsistent approach adopted by Ofwat. We agree that the target for WSI should reflect recent performance data as the current common PCL approach is inconsistent with other targets that use recent outturn data, creating an unreasonable level of stretch for the notionally efficient company. SEW seeks a more bespoke remedy regarding the WSI target, advocating for a revision that better reflects network configuration, timing of enhancement programmes, and the impact of extreme weather events. Given we share many similarities i.e. around network configuration and the risks of severe weather events, we agree with the basis of their arguments.

82. SEW also argues the collar for WSI is unreasonable given "*the risk around WSI is asymmetrical, as the potential for more frequent weather events exposes companies to greater downside risk, while benign weather offers no corresponding upside*"[61]. We agree and support the implementation of a -0.5% RoRE collar as set out in our SoC.

83. We share the same concerns with SEW and TMS that the C-Mex target is incorrectly calibrated and is not reflective of a fair incentive. SEW provide evidence of a regional bias in UKCSI scores and ask to remedy the error by being benchmarked against the all-sector average for the South East. We agree in principle with the objective but believe our remedy[62] is easier to implement and is more reflective of the fundamental problem. We note that TMS argue that the MeXes incentives are overpowered[63]. We agree with this view and share the same concerns that the respective revenue at risk (i.e retail revenue for C-Mex, developer services revenue for D-Mex and non-household wholesale revenue for BR-Mex) is disproportionate vs scale of activity compared to other PCs in PR24 and in light of customer priorities. We seek to remedy this by reducing the ODI rate to the lower of 0.4% RoRE or 5% of retail price control revenue for C-Mex and 0.2% RoRE or 5% of developer services revenue for D-Mex and 0.1% RoRE in the payment calculation for BR-Mex.

84. ANH identifies the need to recalibrate the total pollution incidents target and ODI rate. WSX also state the target for total pollution incidents "*do not take into account the latest evidence on number of incidents which itself is the result of greater monitoring*

[61] SEW SoC, p73
[62] SRN SoC, p402-404
[63] TMS, third party submission in response to disputing companies' statement of case.p13-29

of assets"[64]. We agree with the core arguments here that Ofwat have calibrated this PC incorrectly and the CMA needs to address this at source. We also share the same concerns as ANH around the impact of extreme weather on performance, and that it is important that this volatility is appropriately reflected when setting PCLs as well as calibrating ODIs and necessary collars.

85. ANH presents some additional evidence for the Total Pollutions PC which we support:
    - A new normalisation factor that includes an adjustment reflecting pumping stations and sewage treatment works. This adjustment, based on available data submitted for PR24, is easy to implement and is more reflective of polluting assets given typically, less than half of pollution incidents are caused by sewers;
    - Customer research that calibrates a lower ODI rate using a bottom-up approach;
    - Exclusion of category 4 incidents from the PCL, or in the instance that the EA changes its categorisation approach within the AMP, adjust the PCL, underperformance rate and funding to reflect this.
86. We agree with ANH's view that the FD approach for outcomes is "incompatible with Ofwat's legal duties"[65], and that the current calibration results in the high likelihood that the sector will face significant penalties at the start of AMP8 for certain ODIs.
87. We and other DCs (WSX, SEW and ANH) submit that ODI rates do not accurately reflect the marginal value of the relevant outcomes to customers. WSX argue "*many of Ofwat's ODI rates are not underpinned by marginal benefits*"[66] and SEW state "*ODI rates are no longer directly linked to customer research and results in significant changes from PR19 ODI rates, and in many cases, are substantially higher*".[67] As mentioned previously, ANH in their approach to the recalculate their incentive rate for total pollutions state "*Ofwat's approach to generating top-down ODIs has materially increased the ODI rate on total pollution incidents*"[68]. Several DCs mention that these more punitive ODI rates compared to PR19 result in companies facing significant penalties from Day 1 of AMP8. As such, the framework does not provide a 'fair bet' for companies.

7. Weighted Average Cost of Capital (WACC)

88. There is strong alignment across the DCs on the cost of capital, reinforcing our SoC. We and the other DCs firmly agree that the allowed return on equity is too low. This impedes the sector's ability to raise the record levels of equity capital (and debt capital given the impact on credit ratings) required to invest and deliver for our customers, protect the environment and promote economic growth.
89. Further, due to the impact of sector downgrades and the TMS funding situation, credit rating agencies are only giving credit (in their ratings analysis) for equity that has been committed; as such, companies are having to pre-fund their AMP8 equity

[64] WSX SoC, p160
[65] ANH SoC, p152
[66] WSX SoC, p9
[67] SEW SoC, p66
[68] ANH SoC, p140

requirement into FY26 – at a point of low equity appetite for the UK water sector – which increases the actual cost of financing relative to a phased approach.

90. We and the other DCs have collectively highlighted four main reasons for why the allowed return on equity is too low; these are outlined below.

91. First, risk in the sector has materially increased compared to previous AMPs but this has not been reflected in the allowed return on equity.

92. The sector faces a step-change in capital delivery and performance risk (and this is not evenly distributed across the sector). Each of the major rating agencies has downgraded Ofwat's framework, with Moody's now two notches lower than its assessment of Ofgem's framework.

93. There is a growing concern that water companies will not generate stable and predictable returns. As a result of the growth capital programme, equity investment into water companies has become an investment into capital appreciation (i.e. an assumption of future dividends, which in turn relies on trust in the future regulatory framework) rather than a mix of capital appreciation and current dividend yield.

94. In its cost of new debt, Ofwat has recognised that risk in the sector has increased – via providing a reverse halo, which it did not provide at PR19 – but yet it has not applied an equivalent adjustment to its allowed return on equity.Second, the returns on equity in other regulated sectors are higher than the allowed return on equity provided by Ofwat. While the all-in CoD for corporate bonds have increased significantly, due to the step-change in interest rates, Ofwat's allowed return on equity has remained relatively unchanged from CMA PR19. Ofwat's allowed return on equity is 65bps higher than CMA PR19 but interest rates have increased by 400-500bps over the same window according to SEW.

95. This means that Ofwat has provided equity investors with a lower equity risk premium for holding greater equity risks; any rational investor would not accept this. Further, as Ofwat's allowed return on equity is lower than in other regulated sectors, a rational investor is unlikely to invest in water equity particularly as the competition for infrastructure capital has strongly intensified.

96. Third, the notional company is not debt financeable at the allowed return on equity. Along with ANH and SEW, we have shown that the notional company fails to achieve a Baa1/BBB+ rating under the FD (which already incorrectly assumes new equity is forthcoming at the allowed equity return). We, ANH and SEW have also emphasised that the downside asymmetric risk implied by the FD further undermines debt financeability. We and SEW have shown that, if the notional company performed in line with the P50 RoRE position, it would struggle to achieve an investment grade rating.

97. Lastly, the risk-free rate has increased materially since Ofwat's FD cut-off date of 30 September 2024. Further, Ofwat's FD risk-free rate methodology fundamentally understated the risk-free rate.

98. These four reasons are a consequence of Ofwat's miscalibration of the Capital Asset Pricing Model (CAPM) (as well as risk allocation). We and the other DCs have raised

a series of errors with Ofwat's calibration of the CAPM CoE which it is important that the CMA considers closely as part of its redetermination.

99. Risk-free rate (RFR): All DCs have raised that Ofwat relies solely on index-linked gilt yields but these understate the RFR.

100. Total market return (TMR):

    1. We, ANH, NES and SEW have raised that Ofwat places equal weight on the historical ex-ante and ex-post TMR but sole weight should be placed on the ex-post TMR. This is as the ex-post TMR is more robust than the ex-ante TMR; and
    2. All DCs said that Ofwat does not think that the historical TMR may be highly conservative in the prevailing 'higher for longer' interest rate environment.

101. Beta: All DCs have raised that Ofwat's PR24 beta is below the CMA's PR19 beta which incorrectly implies that water companies are less exposed to systematic risk at PR24 than at PR19.

102. Aiming up:

    1. We, NES, SEW and WSX have raised that Ofwat's allowed return on equity is downward biased based on alternative calibrations of the CAPM that reflect a balanced interpretation of the evidence. Ofwat's aiming up merely serves to partially offset its downward bias rather than to promote investment; and
    2. All DCs have raised that Ofwat's allowed return on equity is below the CoE implied by a wide variety of cross-checks.

103. We, and the other DCs adopt broadly consistent approaches to proposals for remedying Ofwat's CoE errors although these approaches do differ in some targeted areas. All DCs have arrived at broadly similar estimates of the industry CoE (i.e. excluding company-specific adjustments). These estimates are set out in the table below.

Table 3: Comparison of the industry CoE across DCs (CPIH-real, 55% gearing, excluding RMA)

Appellant[1]	SRN	SEW	ANH	NES
Industry CoE	6.51%[2]	>6.32%	>6.25%	5.9-6.2%

Notes: (1) WSX did not present an estimate of the CoE; (2) We adopt notional gearing of 60% in our SoC. The CoE in this table reflects our beta at 55% gearing to allow for comparison (our aiming up is still based on 60% gearing).
Source: PR24 SoCs

104. Our point estimate for the industry CoE of 6.51% is fully consistent with SEW's and ANH's minimum estimates of 6.32% and 6.25% respectively.

105. NES's range for the industry CoE is lower than estimates from other DCs mainly because it has a lower beta. NES's beta appears to place insufficient weight on PNN, which is a better proxy for the notional company than SVT/UUW (though not perfect), and does not factor in higher risk at PR24.

106. We requested the CMA to either mitigate at source or compensate the downside asymmetric risk that a notional company with our specific characteristics faces post-application of our proposed remedies. If the downside asymmetric risk is not mitigated, it should be compensated through a premium on top of our estimate of the industry CoE. SEW and ANH have requested the same.

107. We along with SEW and ANH have adopted KPMG's latest estimate of the industry CoD. WSX did not present an estimate but highlighted errors with Ofwat's cost of embedded debt and additional borrowing costs in line with KPMG's August 2024 position. NES raised that it has concerns with Ofwat's base CoD and has challenged additional borrowing costs based on KPMG's August 2024 position.
108. The table below sets out estimates of the industry CoD adopted by DCs.

Table 4: Comparison of the industry CoD across DCs (CPIH-real)

Appellant[(1)]	SRN	SEW	ANH	NES
Industry CoD	3.71%	3.71%	>3.71%	3.37%

Notes: (1) WSX did not present an estimate of the CoD.
Source: PR24 SoCs

109. There is broad alignment on the industry CoD across DCs. We note that NES's estimate of the industry CoD is lower than other DCs because it has not sought to materially challenge Ofwat's base CoD, even though it has concerns.
110. We, along with SEW, adopted company-specific positions in addition to industry CoD. These positions are notionally grounded relating to factors outside of company control.
111. We along with WSX consider that the reduction in notional gearing from 60% to 55% is in error. We and WSX make a number of common points:
    1. It is unlikely that the notional company can raise new equity at the level required to achieve notional gearing of 55%; and
    2. Ofwat's approach to notional gearing is inconsistent with its CoD.
112. We along with ANH have adopted KPMG's estimate of the retail margin adjustment of nil. NES and WSX cite errors in Ofwat's calculation of the retail margin adjustment which suggests it is too high.
113. We consider that it will be important for the CMA to consider these closely as part of the redetermination.

8. Conclusions

114. Across the SoCs there is generally strong alignment regarding the errors with Ofwat's FD. While this will reinforce the CMA's resolve to analyse carefully the criticisms made of Ofwat's FD in these areas, it should not do so at the expense of other material issues raised by the DCs, including in particular in our SoC.
115. As noted in the Introduction, each of the issues included in our SoC are material in their impact the company, our customers and our environment. We therefore look to the CMA to address each of them in its redetermination, in accordance with its statutory duties and prior decisional practice.