

June 2025

Response to the CMA's Approach and prioritisation document

Response to the CMA's 'Approach and prioritisation' document

Introduction

- 1.1 We recognise and understand the challenges the CMA faces in setting the PR24 redeterminations. This reflects our experience of PR24, which saw a step change in investment requirements, a strong appetite for improved water company performance, and evidence that some customers would struggle to pay for bill increases. However, the challenges are amplified by the shorter timetable the CMA must work to and, in some cases, a lack of clarity around what the disputing companies are asking for. We fully support the CMA's intention to take a proportionate approach to the redeterminations.
- 1.2 We welcome the 'Approach and prioritisation' document and would encourage support from all main parties for the CMA's proposed approach. The CMA's proposed measures to prioritise issues with the biggest impact on outcomes and bills helps achieve its overriding objective: namely, to complete the redeterminations fairly, efficiently and at proportionate cost within the statutory timeframes.
- 1.3 The CMA intends not to focus on issues that meet one or more of four key principles: 'de minimis', 'alternative route', 'well-established practice', and 'disproportionate'.¹ This framework helps provide clarity on the CMA's approach to prioritisation and supports transparency and predictability of decision making. We agree with all the items the CMA intends to deprioritise. In this submission, we offer some reflections on other areas that could meet the CMA's principles.
- 1.4 Although the CMA recognises the perverse incentives that may result from using recent data in its redeterminations, it considers the current legal framework does not allow it to disregard relevant, available and robust data. The CMA has said that it can take appropriate account of current circumstances and information to inform its redeterminations.² We continue to encourage the CMA to consider what 'appropriate account' it takes of more recent data, including in light of its overriding objective. The companies outside of the CMA process will be using the inherent flexibility within their final determinations for the rest of the 2025-30 period, without adjustments for more recent data or a refresh for 2024-25 outturn data.
- 1.5 If the CMA decides to account for 2024-25 outturn data in its final report, it is important to alleviate the risk of an unbalanced or selective redetermination by updating all relevant parameters. This is a significant task given the breadth of areas that would

¹ CMA, [Water PR24 redetermination references: Approach and prioritisation](#), May 2025, pp. 10-11, para 34.

² [OF-OA-034] CMA, Water References: Competition and Markets Authority Guide, December 2024, p. 12, para 3.10.

require updates across the key policy areas of expenditure allowances, outcomes and risk and return, the scale of data that requires 'cleaning', and the CMA's aim to complete its redeterminations by mid-December 2025.

Areas for deprioritisation

1.6 We welcome the CMA's intention to deprioritise the following items from redetermination:

- **issues with an insignificant impact on customer bills and other outcomes.** We welcome the CMA's recognition of the risks of information asymmetry in the process. We interpret the CMA's proposal to refer to a threshold of 0.5% of relevant totex as equivalent to the approach we used to determine whether to assess enhancement expenditure through deep dives or shallow dives.³ This defined 'relevant' totex as either the company's wholesale water totex or wholesale wastewater totex. This approach not only allocates resources sensibly but recognises that companies will routinely deal with changes in costs (both up and down) over the five-year period, most of which will be softened by cost sharing arrangements.
- **new claims or arguments raised since our final determinations, where there is no good reason why it was not raised earlier.** We welcome the CMA's recognition that companies had significant opportunity during the PR24 process to raise issues, and that decisions relating to these issues would have been consulted on extensively.⁴ If it would assist the CMA, we would be willing to provide a view of issues brought forward by the disputing companies that meet this criterion, based on what was submitted to us during the PR24 process.
- **issues being addressed by ongoing industry-wide processes.** This includes asset health and expenditure items in scope of our cost change process. We continue to engage productively with companies across the sector on our enhancing asset health understanding workstream and our cost change process, and the sector has welcomed these processes.
- **PR19 reconciliations.** We welcome that the CMA does not intend to consider this area, given the absence of concerns raised. The CMA however proposes to assess South East Water's claim on its PR19 underperformance payment relating to non-household voids. This claim was assessed under our PR19 reconciliation process, and in any case would likely fall under the materiality threshold referenced by the CMA. On this basis, we think there is an opportunity to deprioritise this claim, under the 'de minimis' principle.
- **retail price control.** As the disputing companies have not raised substantial concerns around the retail control, we support deprioritising it. The CMA states it intends to deprioritise the 'methodology' for the retail control and not to use the

³ [OF-OA-022] Ofwat, PR24 final determinations: Expenditure allowances, December 2024, pp. 102-103.

⁴ CMA, [Water PR24 redetermination references: Approach and prioritisation](#), May 2025, p. 11, para 37.

latest bill forecasts to set retail allowances.⁵ We interpret this to mean the CMA does not propose to reconsider retail allowances in its redeterminations.

- **quality and ambition assessment.** As neither us nor the disputing companies have asked the CMA to redetermine this area, we support deprioritising it. This would mean Anglian Water and Northumbrian Water continue to receive upward financial adjustments of £13 million and £7 million respectively, equivalent to 5bps return on regulatory equity.⁶

- 1.7 We consider the **base cost models** meet the CMA's 'well-established practice' and 'disproportionate' principles for deprioritisation. The PR24 base models built on those used at PR19, and have been further developed over several years in consultation with the sector. Cambridge Economic Policy Associates (CEPA) assessed a wide range of explanatory variables proposed by companies at the Cost Assessment Working Group,⁷ which informed our Spring 2023 base cost modelling consultation.⁸ We refined the models further at draft determinations, taking into account the responses received.
- 1.8 We received relatively few comments on our proposed base cost models in draft determination representations, which we interpret as broad support for our approach.⁹ We therefore made no changes to the models between draft and final determinations. Given this extensive consultation process and the careful consideration already given to alternative cost drivers – including those proposed by disputing companies – we consider there is a reasonable case that revisiting the base cost models in the redeterminations may not be proportionate. Northumbrian Water states that considerable time and effort was spent during the PR19 redeterminations and that it was not a productive exercise, with the subsequent changes being relatively minor.¹⁰ Any changes would affect allowances for all disputing companies. On balance, we consider that focusing on post-modelling base cost adjustments may offer a more proportionate route. Nonetheless, we have set out further considerations in the section below should the CMA choose to re-examine the base models.
- 1.9 We also think the CMA's 'well-established principle' provides an opportunity to deprioritise the **notional capital structure**. We signalled the notional gearing level well in advance of the price review, stating in 2021 that a lower level than at PR19 may be appropriate and setting a level of 55% in our final methodology in 2022. This provided companies with the opportunity to better align their capital structures with this level, should they have wished to, supported by the impact of high inflation on regulatory gearing for companies with fixed-rate debt, such as assumed for the notional company. Our approach is consistent with the UKRN Cost of Capital Guidance, which sets out that

⁵ CMA, [Water PR24 redetermination references: Approach and prioritisation](#), May 2025, pp. 15, 23, paras 52 and 93.

⁶ [OF-OA-016] Ofwat, PR24 final determinations: Quality and ambition summary, December 2024, p. 18, Table 7.

⁷ [OF-CA-102] CEPA, PR24 Wholesale Base Cost Modelling, April 2023.

⁸ [OF-CA-006] Ofwat, Econometric base cost models for PR24, April 2023.

⁹ [OF-OA-024] Ofwat, PR24 final determinations: Expenditure allowances – Base cost modelling decision appendix, December 2024, p. 9.

¹⁰ Northumbrian Water, [Response to other company SoCs](#), April 2025, p. 10, para 43.

'the notional gearing assumption should reflect the regulator's assessment of the balance of risks facing the regulated company, a wide range of benchmarks on gearing levels and overall regulatory policy objectives, not just that of the actual company (or companies) in question'.¹¹

- 1.10 The CMA proposes to correct **agreed unambiguous errors** in the final determinations that are 'straightforward' for it to correct. We think there is an opportunity to deprioritise this area under the CMA's 'alternative route' principle, as we will adjust for unambiguous errors in allowed revenue for all companies through our blind year reconciliation process. The CMA has not prioritised the revenue forecasting incentive formula (which forms part of the disputed determinations by virtue of sub-paragraph 9.1B or, for South East Water, sub-paragraph 8.1B of Condition B). We therefore assume the CMA will confirm the existing formula that allows Ofwat to include unambiguous revenue errors in the blind year adjustment. We aim to complete this process by December 2025. If the CMA elects to make these corrections, we request that it informs us which errors it is considering before the end of July 2025. This will allow us to advise the CMA on the modelling process it will need to follow to correct for specific agreed unambiguous errors. It will also help avoid duplication of effort, and risk of double counting, as without this confirmation we will need to assume that all the corrections for the disputing companies will be excluded from the blind year process, which begins in July.
- 1.11 The CMA intends to take account of elements of the outcomes package not raised by disputing companies that may be seen as 'favourable' to them.¹² We support this balanced approach, as, for example, three of the disputing companies stand to earn net rewards on performance commitments (PCs) over 2025-30 simply for achieving their performance forecasts. However, we consider the CMA's 'alternative approach' principle could be extended to deprioritising **PCLs and ODIs for total pollution incidents**. We mentioned in earlier submissions that reporting changes proposed by the Environment Agency and Natural Resources Wales are expected to affect all companies from 2026.¹³

[REDACTED]

We plan to consult, in line with our change control process, to determine whether there is sufficient reason to reset relevant aspects of the PC. Following this dedicated consultation, we will determine what changes need to be made to the PC definition, PCLs and ODIs. As the redeterminations are expected to conclude shortly after this, we propose that our consultation process runs its course. This would

¹¹ [OF-RR-015] UKRN, UKRN guidance for regulators on the methodology for setting the cost of capital, March 2023, p. 5.

¹² CMA, [Water PR24 redetermination references: Approach and prioritisation](#), May 2025, p. 20, para 71.

¹³ Ofwat, [PR24 redeterminations – outcomes – common issues](#), April 2025, pp. 42-44, paras 6.6-6.12.

also avoid the risk of inconsistency, reflecting that changes will need to be made across all 16 companies, and not just the disputing companies.

1.12 We also consider the 'de minimis' principle for deprioritisation could apply to the majority of ODI issues that the disputing companies have asked the CMA to reconsider.¹⁴ Specifically, we have assessed that most of these issues have a value of 0.5% or less of the relevant PR24 totex allowance, suggesting they could reasonably be deprioritised.¹⁵ In particular:

- all the ODI issues raised by Anglian Water fall below the threshold, except for the calibration of external sewer flooding;¹⁶
- all the ODI issues raised by Southern Water fall below the threshold, except for the calibration of total pollution incidents and C-MeX;¹⁷ and
- all the ODI issues raised by South East Water fall below the threshold, except for the calibration of water supply interruptions.¹⁸

Base cost models

1.13 As set out above, we consider the base cost models align with the CMA's 'well-established practice' and 'disproportionate' principles for deprioritisation from the redeterminations. However, we recognise the CMA may wish to explore this area further. We set out below, and in the Annex, some considerations that may be helpful should it decide to do so.

1.14 Firstly, we welcome the CMA's view that econometric benchmarking models are 'the most important means by which Ofwat and we can mitigate the asymmetry of information that exists between regulators and the companies'.¹⁹

¹⁴ CMA, [Water PR24 redetermination references: Approach and prioritisation](#), May 2025, p. 10, para 34.

¹⁵ See the accompanying file 'Response to the CMA_outcomes_0.5% threshold_summary' and the supporting files specific to each issue.

¹⁶ The proposed changes to the PCL for external sewer flooding represent 0.54% of Anglian Water's PR24 wastewater network plus totex allowance. This estimate may be considered conservative compared to using the wholesale wastewater totex allowance. However, it is consistent with the price control allocation for the PC, which is 100% wastewater network plus. If we include bioresources, the proposed changes would amount to 0.48% of the totex allowance, and therefore fall below the threshold.

¹⁷ The proposed changes to the PCL and the ODI rate for total pollution incidents represent 0.69% of Southern Water's PR24 wastewater network plus totex allowance. For C-MeX, D-MeX, and BR-MeX, companies have not submitted performance forecasts, so we have used our forecasts. For C-MeX and D-MeX, they are presented in the expected RoRE payment models published on [our website](#) under 'Measure of experience performance commitments (PCs)'. For BR-MeX, they are presented in the BR-MeX reconciliation model published on [our website](#) under Table 2, 'Summary of company-specific PR24 reconciliations'. The proposed changes to the PCL and ODI rate for C-MeX represent 11.2% of Southern Water's PR24 totex allowance, based on the application of retail totex. This is consistent with the price control allocation for C-MeX, which is 100% residential retail.

¹⁸ The proposed changes to the PCL and the collar for water supply interruptions represent 1.79% of South East Water's PR24 wholesale water totex allowance. We have not calculated the threshold for C-MeX for South East Water, due to challenges in quantifying the precise impact of incorporating regional factors into the PCL.

¹⁹ CMA, [Water PR24 redetermination references: Approach and prioritisation](#), May 2025, p. 13, para 46.

- 1.15 Secondly, we welcome and fully support the CMA's intention to consider whether any changes in approach leading to upward adjustments should be reflected in downward adjustments for other disputing companies.²⁰
- 1.16 Thirdly, we acknowledge the CMA's proposal to explore a data-driven approach to variable selection, using econometric tools such as the Least Absolute Shrinkage and Selection Operator (**LASSO**).²¹ We did not use LASSO to select the base cost models we used to help set allowances at PR24. Instead, we used a range of model robustness tests to ensure that our base cost models can accurately predict and forecast efficient costs:²²
- Are the estimated coefficients of the right sign and plausible magnitude?
 - Can the models accurately predict the efficient expenditure of companies?
 - How do models perform across a range of statistical diagnostic tests (eg statistical significance of individual parameters; RESET test for omitted non-linearities; and multicollinearity test)?
 - Are the estimated model results stable and robust to changes in the underlying assumptions and data (eg different sample period; removal of most and least efficient company; and alternative model specifications)?
 - Cross-checking efficient base expenditure allowances against business plan forecasts, PR19 base allowances, and outturn spend over the past five years.
- 1.17 We also ensured that the selected base cost models aligned with our overarching principles of PR24 base cost assessment:²³
- data used in our base cost assessment approach is good quality;
 - consistent with engineering, operational and technical rationale;
 - sensibly simple and transparent;
 - focus on exogenous cost drivers;
 - robust econometric cost models;
 - set a stretching but achievable cost efficiency challenge; and
 - a coherent cost assessment approach that drives the right incentives.
- 1.18 CEPA independently tested different model specifications, based on a wide range of new or additional explanatory variables suggested by companies and engineering experts, for its 'PR24 Wholesale Base Cost Modelling' report. It used our PR24 base cost

²⁰ CMA, [Water PR24 redetermination references: Approach and prioritisation](#), May 2025, pp. 12–13, para 43.

²¹ CMA, [Water PR24 redetermination references: Approach and prioritisation](#), May 2025, p. 10, para 31.

²² [OF-OA-024] Ofwat, PR24 final determinations: Expenditure allowances – Base cost modelling decision appendix, December 2024, pp. 15–16.

²³ [OF-OA-024] Ofwat, PR24 final determinations: Expenditure allowances – Base cost modelling decision appendix, p. 15.

assessment principles and a similar set of model robustness tests.²⁴ This informed our 2023 base cost modelling consultation.²⁵

- 1.19 We remain open to exploring potential improvements to our model selection approach. But LASSO was not suggested by any company during the PR24 process, and we did not receive substantial comments on our model selection approach in responses to either our 2023 base cost modelling consultation or the PR24 draft determinations. In the absence of such feedback, we understood there to be a general level of support for the approach we adopted. We are open to considering LASSO at future price reviews.
- 1.20 We understand the main objective of LASSO is to minimise the variance of the model predictions. We have worked closely with our academic econometrician advisor, Professor Andrew Smith of the University of Leeds, and have identified some considerations that the CMA may wish to take into account should it decide to explore the use of LASSO in its redeterminations, which we include in the Annex.

Risk and return

- 1.21 We welcome the CMA's recognition of the value of predictability and consistency in setting the allowed return, to support long-term investment. These principles underpin the recommendations of the 2023 UKRN Cost of Capital Guidance,²⁶ which we and other regulators have signed up to – and which guided our decision making for our PR24 final determinations.
- 1.22 In particular, we welcome the CMA's intention to use the CAPM as the primary model for cost of equity estimation, to use our framework for cost of debt estimation, and to correct for any asymmetric skew in financial incentive returns 'at source'. These are all features which are well-established in UK Water determination methodologies, and which are familiar to investors.
- 1.23 The 'Approach and prioritisation' document does not provide significant detail on the CMA's proposed use of cost of equity cross-checks. We observe that some company-proposed cross-checks have been provided with a limited series of estimates. We consider there is a need to test and scrutinise the performance of cross-checks over longer durations encompassing previous price control periods, particularly where they are novel, do not have a track record of public consultation, and/or have not been used in previous determinations.

²⁴ [OF-CA-102] CEPA, PR24 Wholesale Base Cost Modelling, April 2023.

²⁵ [OF-CA-006] Ofwat, Econometric base cost models for PR24, April 2023.

²⁶ [OF-RR-015] UKRN, UKRN guidance for regulators on the methodology for setting the cost of capital, March 2023.

- 1.24 The reference to the financing duty in the 'Approach and prioritisation' document under the heading 'financeability' may encourage companies to further conflate the financing duty with an assessment of 'financeability'. We consider it is important to maintain a distinction between financeability and the overall application of the financing functions duty. Financeability is simply an assessment of the adequacy of financial headroom for a company with the notional capital structure; it is, and can only be, one element of the considerations that must be given to securing that the financing functions duty (alongside other duties) is met in setting the determinations. We commented on this issue in a previous submission.²⁷

Using new evidence and updated information

- 1.25 We welcome the CMA's recognition that taking account of more recent data than was available to us when we set our final determinations risks incentivising companies to challenge our determinations only when the new data is likely to be favourable to them.²⁸ We agree this has the potential to undermine the business planning process.
- 1.26 In our response to the statements of case, we said there are a number of potential options for a cut-off date for new evidence, including limiting the information used to set the redeterminations to that which was available to us when we set our final determinations in December 2024.²⁹ We still think this is an option the CMA should consider, to help achieve its overriding objective to dispose of redetermination references fairly, efficiently and at proportionate cost within the prescribed time periods.
- 1.27 The legal framework gives the CMA discretion about how to make the redeterminations, as long as it does so in accordance with the principles which apply, by virtue of Part I of the Water Industry Act 1991, in relation to determinations by Ofwat (section 12(3)(b) of the Water Industry Act 1991). The CMA already intends to apply timing 'cut-offs' for the inclusion of new data, to enable it to quality assure its calculations and complete its analysis ahead of publishing its decisions. We consider it is open to the CMA to apply earlier cut-offs for new evidence to help achieve its overriding objective, if it considers such an approach is best calculated to achieve the duties set out in section 2 of the Water Industry Act 1991.
- 1.28 We welcome that the CMA differentiates new data from new methodological arguments and claims.³⁰ We would be happy to assist the CMA to determine the issues that fall under the latter; that is, those not raised in reasonable time during the PR24 process,

²⁷ Ofwat, [PR24 redeterminations – overview of our response to the statements of case](#), April 2025, pp. 52–54, paras A1.52–A1.59.

²⁸ CMA, [Water PR24 redetermination references: Approach and prioritisation](#), May 2025, p. 24, para 96.

²⁹ Ofwat, [PR24 redeterminations – overview of our response to the statements of case](#), April 2025, p. 38, para 5.18.

³⁰ CMA, [Water PR24 redetermination references: Approach and prioritisation](#), May 2025, pp. 11, 21–22, paras 37 and 82.

where the company could reasonably have done so. This can help reduce the potential undermining of the business planning process.

- 1.29 The CMA proposes to consider whether to use 2024-25 outturn performance data in its final report. Using the most recent outturn data would reflect the most recent cost pressures and efficiencies, and may improve the precision of estimated model parameters. Further, we consider the PCLs for leakage should be updated to reflect the 2024-25 outturn position.³¹
- 1.30 However, as the CMA recognises,³² quality assuring this data and applying updates is a significant task that can take some time to deliver robustly, given the number of areas that would need to be updated. These include base cost models, enhancement cost models that use historical data (such as for storm overflows, phosphorus removal and supply interconnectors), PCLs, ODIs, risk modelling, the allowed return on embedded debt, and potentially the benchmark adjustment for the allowed return on new debt.
- 1.31 As mentioned above, companies outside the CMA process will be using the inherent flexibility within their final determinations, without the more recent data or a refresh for the 2024-25 outturn data, for the rest of the price control period.
- 1.32 The CMA states that, if it were to update for the 2024-25 outturn data, it would not be feasible to use it for the provisional determinations in mid-September. This may mean significant changes being introduced after the provisional determinations. If so, we consider it would be necessary to consult adequately on such changes ahead of the final report, to ensure the fairness set out in the overriding objective and public law principles more generally. Our view is that this may compromise the ability of the CMA to achieve its ambition to issue the final report by mid-December 2025.
- 1.33 As explained further in our response to the statements of case,³³ if the CMA opts to include the base cost models in scope of its redeterminations, we think it would be crucial to:
- reassess the performance and robustness of the econometric models with the additional year of data;
 - assess whether the additional year of outturn data requires updates to cost driver forecasts out to 2029-30;
 - consider whether the catch-up efficiency adjustment needs updating to reflect the latest outturn information; and

³¹ Ofwat, [PR24 redeterminations – response to Anglian Water's statement of case](#), April 2025, p. 38, paras 4.57-4.59.

³² CMA, [Water PR24 redetermination references: Approach and prioritisation](#), May 2025, p. 25, para 98.

³³ Ofwat, [PR24 redeterminations – Expenditure allowances – common issues](#), pp. 26-27, paras 2.57-2.59.

- consider whether updates to the sector-wide base cost adjustments are needed to maintain internal consistency between the base cost models and cost adjustments, and to ensure that customers do not pay twice.

1.34 Finally, while noting the arguments against changing the mechanism for indexing the RCV, we welcome the CMA's intention to consider the treatment of inflation as part of the redeterminations of the allowed return.³⁴ It is important to recognise the recent and ongoing gains to shareholders of higher-than-expected CPIH inflation, when considering the overall balance of risk and return. The OBR's recent inflation forecasts suggest these gains look set to continue in the medium-to-long term.

Looking ahead

- 1.35 We support the CMA's intention to focus its work and resources by taking a proportionate approach to prioritisation. As the CMA recognises, this is important for a number of reasons: so that the redeterminations can be completed fairly and efficiently within the statutory timeframe; to recognise the information asymmetry between the CMA and the disputing companies; and to manage the incentive for disputing companies to be selective in the issues they raise. The approach is also consistent with the CMA's guidance.
- 1.36 We would encourage support from all main parties for the CMA's proposed approach. The redeterminations process to date has revealed a pressing need for the CMA to take steps to ensure proportionality. The disputing companies have submitted several thousands of pages of material into the process. New claims and information continue to be submitted and referenced in each round of submissions, with the most recent company submissions having significantly exceeded the CMA's stated page limits. The CMA rightly identifies a need to draw a line on new data, to provide sufficient time to consider and assure its redeterminations.³⁵
- 1.37 We continue to be committed to giving the CMA all the assistance we can throughout the redetermination process, to help deliver the best outcomes for customers and the environment.

³⁴ CMA, [Water PR24 redetermination references: Approach and prioritisation](#), May 2025, pp. 22–23, para 89.

³⁵ CMA, [Water PR24 redetermination references: Approach and prioritisation](#), May 2025, p. 22, para 83.

A1 Further considerations on the use of LASSO

A1.1 We have worked closely with our academic econometrician advisor, Professor Andrew Smith of the University of Leeds, and have identified some considerations that the CMA may wish to take into account should it decide to explore the use of LASSO in its redeterminations:

- **Consultation process.** As set out above, our models built on those used at PR19, and have been developed in consultation with the sector over several years. As the base models were consulted on with all water companies, the CMA may want to consider how it could consult with all water companies on the use of LASSO technique and its associated modelling choices.³⁶
- **Consistency with our base cost assessment principles.** Our PR24 base models were developed reflecting our base cost assessment principles. We consider that LASSO would provide most benefit if used in conjunction with other important aspects of our model selection criteria, which would help to avoid perverse and unintuitive results. See Table A1 for more details.

Table A1: LASSO and consistency with base cost assessment principles

Principle	Our comments
Data used in our base cost assessment approach is good quality	<ul style="list-style-type: none"> • Poor data quality can bias parameter estimates, leading to incorrect conclusions. • A key example is average pumping head. Data quality improved at PR24 versus PR19, but we considered it was not appropriate to place 100% weight on water models that include average pumping head, as data quality can improve further.
Consistent with engineering, operational and economic rationale	<ul style="list-style-type: none"> • The estimated parameter estimates should be consistent with engineering and operational rationale and produce intuitive results. For example, it is likely to be inappropriate to include an explanatory variable which was statistically significant but the estimated beta coefficient has the wrong sign.
Sensibly simple and transparent	<ul style="list-style-type: none"> • Our base cost models capture the key cost drivers that explain variations in base costs between companies. • LASSO could lead to models that are overly complicated and difficult to interpret, or are overly simplistic (ie fail to capture the key cost drivers). • It may therefore be more appropriate to use LASSO to choose between explanatory variables that reflect the same cost driver, rather than develop base cost models from first principles.
Focus on exogenous cost drivers	<ul style="list-style-type: none"> • We focused on using exogenous cost drivers / explanatory variables. • This helped to ensure the independence of our base allowances, which incentivises companies to reveal true efficient costs in business plans. • This principle also helps to avoid perverse incentives. For example, including leakage in the base cost models may discourage companies from reducing leakage if this leads to a lower base allowance. • We applied the same principle at PR19, which the CMA supported.³⁷

³⁶ By modelling choices, we refer to the choice of lambda as a penalty and of modelling period for the prediction and training data set periods.

³⁷ [OF-RR-013] CMA, Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations: Final report, March 2021, pp. 171-177.

Robust econometric cost models	<ul style="list-style-type: none"> • We selected our base cost models based on a wide range of model robustness tests. • For example, we did not consider it was appropriate to include Southern Water's proposed coastal variable in the sewage treatment models because:³⁸ <ul style="list-style-type: none"> ◦ percentage of the population served that live in coastal areas does not have a clear engineering rationale; ◦ the estimated relationship between the coastal variable and sewage treatment base costs is sensitive to the inclusion of Southern Water in the dataset; and ◦ the inclusion of the coastal variable in the sewage treatment base cost models led to counterintuitive outcomes. For example, South West Water, with the second highest percentage of coastal population, would have received no increase in allowance.
Set a stretching but achievable cost efficiency challenge	<ul style="list-style-type: none"> • The CMA may need to consider the impact of any changes to the base cost models on the catch-up efficiency challenge, and whether it remains sufficiently stretching and achievable.
A coherent cost assessment approach that drives the right incentives	<ul style="list-style-type: none"> • The CMA may need to consider the impact of any changes to the base cost models on: (i) cost adjustments, including the sector-wide cost adjustments (mains renewals, meter renewals, network reinforcement, phosphorus removal opex, energy, net zero); and (ii) PCLs.

³⁸ [OF-OA-024] Ofwat, PR24 final determinations: Expenditure allowances – Base cost modelling decision appendix, December 2024, p. 40.

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