Centre City Tower, 7 Hill Street, Birmingham B5 4UA
21 Bloomsbury Street, London WC1B 3HF

Meeting note

Tuesday 28 September 2021
11:00 am to 1:00 pm

Cost assessment working group (CAWG)

Attendees

Anglian Water	Richard Goodwin
Dŵr Cymru	Charlotte Beale
Hafren Dyfrdwy	Kristinn Mason
Northumbrian Water	Crawford Winton
Severn Trent Water	Kay Orsi
South West Water	Judith Corbyn Mark Worsfold
Southern Water	Michael Kearns
Thames Water	Carlos Pineda Bermudez
United Utilities	Sam Crook, Edward Dalton
Wessex Water	Harriet Cutts David Peacock
Yorkshire Water	Daniel Chubb
Affinity Water	Martin Hall
Bristol Water	James Holman
Portsmouth Water	Anne Louise McGinn
SES Water	Van Dang
South East Water	Matt Hersey
South Staffs Water	Daniel Haire
Ofwat	Tim Griffiths, Daniel Mitchell, Simon Harrow, Gilda Romano, Beckie Paterson, Matthew Greetham, Shivani Lad, Alex Whitmarsh, Sarah Watson, Arturo Casal, and Stewart Loftus.

Introduction

Ofwat opened the meeting, introduced the team and set out the agenda:

- Assessing capital maintenance expenditure at PR24, Ofwat;
- Reflecting future cost pressures in cost assessment at PR24, South West Water and Severn Trent Water;
- Forward looking asset health metrics, United Utilities; and
- Closing remarks.

Assessing capital maintenance expenditure at PR24

Ofwat presented a recap on the PR19 approach to assessing capital maintenance expenditure (i.e., as part of modelled base costs), and summarised the key arguments presented by companies and Ofwat in this area during PR19. Ofwat also set out the conclusions the CMA reached during the PR19 appeals, which broadly supported Ofwat's approach to assessing capital maintenance expenditure. It recapped the CMA's suggestion that Ofwat develops a forward-looking element to its capital maintenance assessment to assist in triangulating results from the historical econometric base cost models.

Ofwat moved on to set out its ambition to build on our PR19 approach to assessing capital maintenance expenditure and maintaining asset health at PR24. It summarised the content of its PR24 May 2021 consultation 'PR24 and beyond: Creating tomorrow, together' and the feedback received from stakeholders in relation to capital maintenance.

Ofwat expressed a keenness to understand why forward-looking costs may be different from those incurred in the past from the industry. Particularly when base expenditure has increased and performance has improved (i.e., improvements in asset health metrics such as mains bursts/repairs), but asset replacement rates have decreased over time. We asked the sector to explain why asset replacement rates had fallen. Companies said it can partly be explained by the quality mains replacement programme in the early 2000s, and also companies taking advantage of a more efficient approach to capital maintenance following the introduction of the totex regulatory framework in PR14. Ofwat also said that it has not seen evidence that the network is deteriorating, and/or that the rate of asset deterioration will be faster in the future because of factors such as climate change.

Ofwat then set out some potential options to incorporate a forward look into our approach to assessing capital maintenance expenditure at PR24. Ofwat also explained that it did not consider separate capital maintenance modelling is an option worth considering as it would not be in line with our totex regulatory framework and it may cause capex bias.

South West Water and Severn Trent Water followed by setting out their thoughts on how to reflect future cost pressures in cost assessment at PR24.

Questions for the breakout groups were:

(1) What evidence is available to demonstrate that the future is different to the past?
(2) Do we need to make changes to our base cost assessment approach to account for future cost pressures? Or is the cost adjustment claim process sufficient?
   - Include forecast costs in base cost econometric models
   - Set a forward-looking base cost catch-up efficiency challenge
   - Include additional exogenous variables, and/or adjust existing variables, in the base cost models
   - Sector wide adjustment to base cost allowances
(3) What role should asset management maturity assessment (AMMA) and the common framework play in PR24, if any?

Feedback from the discussion groups

Q1) What evidence is available to demonstrate that the future is different to the past?

Companies suggested some potential areas where there may be evidence to suggest that the future is different to the past.

- Some companies said it is challenging to say what evidence is available to signal that the future is different to the past.
- Some examples that were provided include:
    - **Asset lives can be shorter than they have been historically**. Particularly for some asset classes. Companies are deploying more instrumentation and control (with shorter asset lives), which could lead to increased expenditure in a shorter timeframe in the future. Loggers were suggested as a potential example of this. It was noted that while they have been around for a long time, they are used more frequently than before as they are used to measure a range of things (beyond pressure, flow, etc.).
    - **Metering programme** (i.e., scale is different).
    - **Climate change and net zero**. Some companies considered it was up to them to demonstrate in business plans that factors like net zero and climate change are not captured in the base cost econometric models.
- Climate adaption reports might provide some information about risks coming up and any reinforcement that might be needed, and therefore provide an indication of possible future cost pressures. Similarly, some companies suggested that the AMMA and/or the common framework could help to understand what factors may be causing asset health to deteriorate.

- Some companies suggested that the complex asset deterioration models used by companies to inform decision making may provide helpful insights, but consistency across companies likely to be a problem. A deep dive of asset deterioration models could be helpful in identifying comparative metrics, but it is likely to be time and data intensive, and would reduce company ownership of their own asset management strategy. It was also noted that it would be a challenge to use asset deterioration models to identify the causal factors driving increased or decreased asset deterioration rates. For example, it is difficult to separate out assets that are coming to the end of their useful life or those that have been worked harder due to increased demand or other factors (e.g., climate change).
- Weather data, particularly on extreme weather events, may be helpful. But forecasting the data into the next price review period would be challenging. Using the change in the number of extreme weather events could be one way to produce forecasts. But weather data alone does not link the consequences of climate change on the ability of assets to perform their functions. This would require forward looking asset health metrics.
- Companies recognised the need for better information around many factors, including asset health and resilience. Longer term metrics may be helpful. But comparability across companies is a challenge. A sector wide approach/standardised asset health framework for companies to follow may be helpful.
- Developing new metrics within the PR24 timeframe likely to be challenging given the need for consistent data. Particularly if they are to be captured in econometric models.
- Engineering input is required to assess factors such as population growth and extreme weather. A separate workshop with engineers may be helpful.
- Other related issues raised:
    - Need to consider the time lag between when the asset replacement takes place and when companies witness performance improvement, and whether this is captured in the outcomes framework. Detailed asset level data may help.
    - Companies are getting better at managing their asset bases, which may explain reductions in asset replacement rates.

Q2) Do we need to make changes to our base cost assessment approach to account for future cost pressures? Or is the cost adjustment claim process sufficient?

- Companies welcomed the cost adjustment claim process, and a number of companies supported the framework suggested by Severn Trent Water (i.e., focus on the greatest future risks, such as maintaining assets in a net zero world, and maintaining current level of resilience given future stresses). Narrowing the scope of the cost adjustment claim process would also reduce the labour intensive nature of the cost adjustment claim process for Ofwat and companies.
- Some companies considered it is challenging for them to claim that their own costs are more/less than others as companies have access to their own data but not other companies' data.

- Companies considered it would be important to be cautious in including forecast costs in the wholesale base cost models as they could reflect a difference in risk appetite / ambition between companies. Important to ensure that a company with a high risk appetite is not setting the benchmark, and potentially penalising other companies with different but valid business plan strategies. Companies also raised the concern that the use of forward looking costs could lead to perverse incentives (e.g., inflate forecast costs).
- But it was also recognised that the inclusion of forecast costs in the base cost models could be helpful if these issues could be overcome. Maybe consider three different time periods: historical period only, forecast period only, and historical and forecast period combined.
- Companies expressed caution when considering new explanatory variables as they are unlikely to be totally exogenous, and 'correlation' between two variables does not necessarily mean 'causation'.
- Companies provided limited suggestions for additional explanatory variables to consider. Some companies mentioned that historical asset replacements were driven by quality improvements, so may not be a good driver of asset health. A couple of companies considered the base expenditure requirement associated with the p-removal enhancement programme should be considered, either in the model or as a cost adjustment claim. But the trade-offs between nature-based solutions and p-removal enhancements should be considered.
- One company considered the 5-year regulatory cycle was too restrictive and asked for in-period capital maintenance reassessments. The same company also asked that the capital maintenance allowance is ringfenced as part of a price control deliverable otherwise it gets lost in other priorities (i.e., use it or lose it allowance).
- One company recognised that modelling capital maintenance has its pros and cons, and it is important to recognise the risk of including too many variables in the models.
- A broader suggestion was to develop a decision tree to assess how certain factors / cost drivers should be captured in the cost assessment framework.

Q3) What role should asset management maturity assessment (AMMA) and the common framework play in PR24, if any?

- AMMA provides a good source of information but there was no consensus on how it should be used at PR24. One company suggested that it could be used to justify any uplifts to allowances, and another said that it should only be used to inform the assessment of large investment cases. Another company said that AMMA could be used to address potential concerns about the confidence and assurance of forecast data. But a concern was also raised that AMMA may demonstrate who has the most resources available to write a good report / response rather than who has the best asset management capabilities.
- Some companies considered that the common framework should be used by companies to develop their business plans, but does not necessary need to be used by Ofwat. It could be used to address potential concerns about confidence and assurance of forecast data.

Forward looking asset health metrics

United Utilities presented a potential asset health framework. It also presented potential options for new asset health measures and/or the development of existing asset health measures to support best value long term investment.

In response to United Utilities presentation, Ofwat noted that asset health metrics are improving (and are required to improve under the PR19 settlement) and base expenditure has continued to increase. In that light, we asked participants to consider the following questions in breakout groups:

1) What factors are causing asset health to deteriorate?
2) What evidence/data is available to demonstrate that asset health is deteriorating?
3) Can industry wide forward-looking asset health indicators be developed in time for business plan submissions in 2023?

Feedback from the discussion groups

Q1) What factors are causing asset health to deteriorate?

- A small number of asset health measures replaced a wider suite of metrics (i.e., serviceability basket). Companies still use many of these older metrics. Outcomes framework should include long term measures as well as the current short term performance measures. Are current performance commitments incentivising long term outcomes? Could RCV penalties be introduced to create the right long term incentives?
- Expectations from assets are changing, which will affect their lifespan. Asset life remaining is the key indicator, not asset age.

Q2) What evidence/data is available to demonstrate that asset health is deteriorating?

- Good data to evidence asset health deterioration may not be available, otherwise it would have been used to justify cost adjustment claims at PR24.
- Companies should have their own basket of measures to track asset health within asset deterioration models. But to get all companies to report on a consistent basis would be challenging if not impossible.
- It may be worth trying to understand the rate of change in asset health rather than the absolute values. Risk is more measurable and comparable. Long term, average asset health variation is managed but not the extreme events (e.g., cliff-edge). It may be sensible to focus on that.
- One company suggested that we could potentially use AMMA and common framework to understand what factors may be causing asset health to deteriorate.

- One company suggested asking companies where they have been spending their allowances. They considered that companies may have been spending on assets to meet certain outputs, at trade-off with other investments. The company subsequently thought this could be a symptom of skewed investment planning in the long-term in order to meet regulatory incentives and obligations in the short term.

Q3) Can industry wide forward-looking asset health indicators be developed in time for business plan submissions in 2023?

- The UKWIR project to date has focused on defining what asset health and exploring how companies monitor it. Developing forward looking metrics may be more of an ambition for PR29.
- Some companies are internally working on asset health measures but need to share and get buy in from the sector.
- AMMA should provide all asset health measures used by companies to monitor asset health.
- Could be helpful to focus on below ground assets at PR24 as these are more generic and should be easier to model.
- DWI's RARE measure (risk assessment on water quality) – could be useful to assess investment needs to improve water quality. Maybe more comparable across companies.

Closing remarks

Ofwat invited written feedback on the content discussed in this Cost Assessment Working Group (CAWG) meeting within the next two weeks.

Ofwat informed attendees that in response to feedback, it would endeavour to release CAWG meeting slides a week in advance moving forward. But Ofwat also said that it would need to receive company slides two weeks in advance of the meeting to enable this deadline to be met.

Ofwat outlined its intention to request feedback on the CAWG meetings to date via Microsoft Forms to ensure it receives feedback from a broad range of companies.

Ofwat outlined the schedule for forthcoming meeting:

- Growth cost assessment (ANH and tbc) – 12th October

Ofwat mentioned that meeting notes for this CAWG meeting and previous CAWG meetings are uploaded onto our website at the following location:

https://www.ofwat.gov.uk/regulated-companies/price-review/2024-price-review/pr24-working-groups-and-workshops/

Ofwat also asked companies to let us know if they are currently working on any relevant cost assessment papers for the Future Ideas Lab and would like to present an overview of the paper at a forthcoming workshop.