Wessex Water Services Ltd Response to Ofwat's PR19 Draft Determination – August 2019

Representation reference:	Outcomes O2
Representation title:	Mains repairs

Summary of issue

The target set in the draft determination for mains repairs is not credibly achievable, and our board cannot accept this.

Our historical performance has consistently been better than our serviceability performance commitment, although it has varied year-on-year primarily due to weather conditions as demonstrated in the following chart.

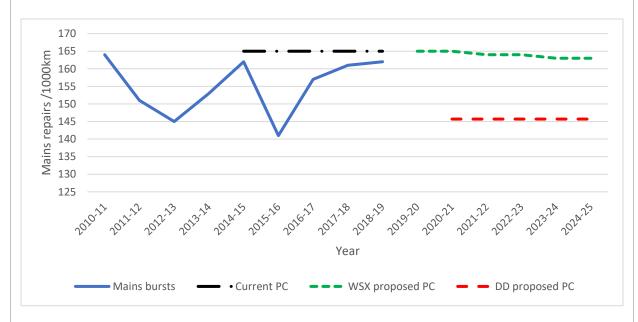


Figure 1-1: Mains repairs

At both PR09 and PR14, companies were funded to deliver stable serviceability, based on their own long-run metrics rather than on a comparative basis. To the extent that that has been achieved, forward looking cost allowances based on models of historical costs can therefore be expected to deliver stable asset health on an individual company basis rather than improving asset health.

If we were to maintain our stable performance and meet our proposed target of 163-165 repairs per 1000km of main, the draft determination would however lead to a penalty of c.£8m across PR19.

In our plan we committed to invest to maintain stable asset health at a level that is acceptable to customers. This is despite a commitment to reduce leakage, which, all else equal, will increase the number of mains repairs made.

We note that Ofwat does not accept research from several companies, including that submitted by Wessex, demonstrating that reducing leakage will require more repairs to mains. Ofwat fails to understand that most leaks come from broken mains. To stop leaks, we repair the mains. As a result, repairing more leaks will lead to more mains repairs.

In the 'Delivering outcomes for customers policy appendix', Ofwat states that

"We are concerned that the approach proposed by some companies to reduce leakage by significantly increasing the number of temporary repairs on pipes may not improve the health of the assets over the long-term."

It goes on to say

"The number of mains repairs is an indicator of mains asset health or condition. An increase in the number of mains needing to be repaired may indicate the worsening health of the assets."

Clearly, these statements are both true. They do not, however, recognise that the clear linkage evidenced in many companies' research between finding leaks and needing to repair mains does not exist. This is supported by practical, real-life expertise that shows the main method of reducing leakage is, and will continue to be, "find and fix", which requires us to repair mains.

The draft determination intervention has set our performance commitment target level at 145.7. This compares to our business plan submission of 165, reducing to 163. The draft determination does not tie this to evidence that customers are willing to pay for the necessary investment to reduce the number of mains repairs.

Moreover, in engineering terms, a step-change of this scale in asset performance by April 2020 is not possible and could only be achieved over the very long-run through significant increased mains replacement programmes.

Change requested

We request that Ofwat sets our target at the stretching but achievable values we proposed in our business plan, which are supported by sound engineering judgements as detailed in the following sections.

We request that Ofwat sets our incentive rates at the values we proposed in our business plan, which are supported by customers and based on research and triangulation that Ofwat has called 'high quality' and has been assured by a respected and independent third party.

Rationale (including any new evidence)

Our technical report

We submitted a 30-page technical report as part of our IAP response, which considered

- A review of historical and future leakage and mains burst data provided by Wessex Water and other comparative information publicly available for other water companies.
- A review of data collated by Wessex Water from PR19 Business Plan September 2018 tables Wn2 and Appointee 1.
- A review of all relevant UKWIR reports and draws conclusions on the relationship between leakage reduction and mains bursts.
- A high-level assessment of likely range of burst rates in AMP7 and beyond, based on the 15% leakage reduction in AMP7 and further leakage reduction thereafter

The report finds that increased leakage reduction will increase the number of mains repairs.

Ofwat's DD intervention states the following in relation to this research.

"The company provides insufficient evidence that higher number of repairs is caused by maintaining leakage at lower level. The statistical analysis provided shows a weak relationship. The authors state they do not expect to be able to explain all the variation of mains jobs using only leakage reduction. Therefore, the company provided insufficient evidence that there is a valid relationship between leakage levels and numbers of repairs. The company does not provide any evidence that increased active leakage controls to achieve 15% leakage reduction will increase the repair numbers as stated in its response."

It appears that Ofwat has misinterpreted the conclusions from our report and based its response on a single section in our report. We do not agree with Ofwat's statement that our report does not provide sufficient evidence. Our report demonstrates that there is a relationship between leakage and mains repairs drawing on a wide evidence base.

First, our report states that "Wessex Water's historic data clearly shows that as their leakage levels have been reduced there has been an increase in the number of mains bursts" and that "In transitioning to lower leakage levels the evidence is that mains burst numbers remain higher to maintain the lower leakage levels achieved."

Second, the authors state that "Whilst some of the planned ALC policies do not adversely affect burst rate, and pressure management interventions should reduce the burst rate, there remains an overall increase in forecast mains burst rate resulting from intensive ALC activity and reducing leakage levels".

Third, the report noted that in all five reports conducted by UKWIR, each found that changes in numbers of bursts were influenced by the overall leakage effort. We expect the current report that focuses specifically on this relationship will deliver the same finding.

Lastly, noting that one cannot explain all the variation of mains jobs using only leakage reduction is like saying one cannot explain all the variation in customer satisfaction with a brand using only the quality of goods being sold. Clearly, satisfaction is influenced by factors other than quality (like price or service) but an increase in quality will undoubtedly increase customer satisfaction. Ofwat should not solely rely on our overall regression analysis but should consider common sense approaches and expert engineering knowledge provided by us as valid evidence.

Issues with target selection

A separate but related issue is the methodology that Ofwat has used to select its target. Ofwat has simply chosen the average of the three best years' performance from the recently available data. Weather is another driver of the number of mains repairs, as shown by the impact of the Beast form the East.

In its webinar Q&A, Ofwat states that "In our assessment we used three out of the last seven years and consider three years provides a good balance between appropriately challenging companies to continue to achieve their best performance and to not be unrealistic e.g. significantly affected by weather".

This is a mathematically dubious approach. Ofwat has made no attempt to even consider the impact of weather (or any other factors, such as leakage control) in this arbitrary approach to setting targets.

Our aim

Our aim is to keep mains bursts stable. With the introduction of aggressive leakage reduction targets, this is not deliverable in the short term, let alone in the long term and there is no evidence to show that customers would support this level of investment.

Moreover, even if we were to dramatically increase our mains renewal programme and seek to replace the entire network over 50 years (compared to our current renewal rate, which would take 250 years to achieve the same), there would still be 90% of the network that would not be done by 2025.

A further concern is that Ofwat has stated that it may impose further penalties for this kind of measure should companies fail to meet important targets. Our board cannot accept a target with associated incentive rates that may later be seen as a bigger failure with increased penalties.

We request that Ofwat sets our target at the level proposed in our original business plan.

Why the change is in customers' interests

Mains repairs are not an outcome. They are, at best, an output and could even be argued to be an input. In the most part, customers are not impacted by a mains repair in terms of the level of service they receive.

Each year we complete around 1,800 to 2,000 mains repairs, most of which are repaired without any customer impact. Often supplies are maintained throughout and the repairs is completed by "clamping" the main, i.e. repaired without the need to shut the main down.

For those repairs that do require the main to be shut down to be completed, this can be achieved without customer impact by network rezoning, installing additional valves and hydrants and/or providing a temporary supply arrangement.

In any one year, typically more than 50% of all supply interruptions are caused by less than 25 mains bursts (c.1.3% of all mains bursts), usually due to site specific issues such as the inability to rezone demand and/or health and safety issues delaying the repair.

We acknowledge that there may be minor traffic impacts, carbon impacts and noise impacts but these rank very low in customers' priorities. Moreover, the cost of the alternative – mains replacement – is uneconomical and undeliverable at the level that would be required to deliver a 15% reduction in leakage.

The target Ofwat has set in the DDs is therefore not in customers' interest. We note that in the PR14 CMA Appeal by Bristol Water, the CMA came to the view that:

- Customer research is important, and CCG's views need to be taken into account;
- Horizontal targets (which were based on the historical upper quartile at PR14) are not likely to be equal to the economic level of performance.

Specifically, the CMA stated that "Although the extent to which this is true will differ between metrics, we were not convinced that a blanket use of the industry upper quartile target was a superior method".¹ The economic level of mains repairs is evidenced by our own cost-benefit analysis which reflects our customer views. Our PR19 target level should reflect the economically optimal level.

Links to relevant evidence already provided or elsewhere in the representation document

DD representation - Outcomes summary

Response to IAP - standalone document

Response to IAP – appendix 14

Chapter 1 and associated appendices of business plan

Chapter 3 and associated appendices of business plan

¹ CMA, Bristol Water plc: A reference under section 12(3)(a) of the Water Industry Act 1991, 2015, Appendix 9.1, page A9(1)-8, paragraph 15

CMA, Bristol Water plc: A reference under section 12(3)(a) of the Water Industry Act 1991, 2015, Appendix 9.1