

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

Representation reference: Cost Assessment C12

Representation title: Enhanced supply interruptions

Summary of issue

Our performance for supply interruptions in 2018-19 was upper quartile and we are seeking to achieve a 50% reduction in this key performance metric by 2025.

Ofwat acknowledge for other drivers that, where a company is performing at the historical upper quartile, it may be appropriate to allow additional funding above the base cost models to improve further. This concept should be extended to other key areas of service, such as supply interruptions, but currently Ofwat has disallowed the enhancement expenditure needed to achieve the step change in service standards required for this common performance commitment.

Given that we are already an upper quartile performer, and that we have reduced supply interruptions for planned work to almost zero, it is not feasible to achieve the target without additional expenditure.

Change requested

We request that in the Final Determination Ofwat allow additional funding for the efficient cost of improvements to deliver the target, as identified in our business plan.

Relevant values are summarised in the table below along with confirmation of the value we request in order to achieve the target, which is supported by our customers.

Supply interruptions	£m
PR19 business plan	13.876
Draft determination	0
Representation request	13.876

Rather than providing an explicit cost allowance as above, an alternative approach, that is acceptable to us, would be to recognise the £13.9m cost as an implicit efficiency challenge which should be offset against (reduce) the overall productivity/efficiency challenge of 1.5% per annum.

Rationale (including any new evidence)

It is not feasible to deliver a step change in performance for supply interruptions down to the forecast upper quartile level in 2025 without any additional funding.

In the draft determination Ofwat have restated their position that they expect us to deliver this step change in performance through base cost allowances. No evidence is provided that this is actually feasible.

In section 5.4 of our summary representations document we set out our overall conclusion that Ofwat's base plus models at best only make sufficient cost allowances for average levels of performance.

We summarise below:

- 1) our conclusions about whether wholesale base cost allowances are sufficient to deliver upper quartile service levels for the common performance commitments, and
- 2) the evidence with regard to supply interruptions.

1) Are wholesale base cost allowances sufficient to deliver upper quartile service levels for the common performance commitments?

In our response to Initial Assessment of Plans in March 2019 we provided a detailed review of whether the base cost models (as they were at the time) provided sufficient allowances for enhancing the common performance commitments to future upper quartile levels (section 3.3.4 pages 29 to 35). We considered four aspects in detail and concluded that on each aspect there was no evidence that the base cost allowances were sufficient. The result was an additional implicit regulatory efficiency challenge in relation to the costs of quality improvements not funded through the base cost models, exacerbated by a further 1.5% productivity challenge on top of this base cost challenge.

We have reviewed this aspect again based on the draft determination in relation to the new base plus cost modelling, as set out in the accompanying Draft Determination Summary representations document (section 5.4). Our conclusion is that Ofwat's base cost plus modelling approach at best only gives sufficient expenditure for average historical levels of performance.

Therefore where our performance is beyond that implicitly funded by base costs allowances we consider that an additional cost allowance over and above the base cost allowances needs to be made. This position applies to supply interruptions where our performance is upper quartile, and for which we request acceptance of our request for enhancement funding - as summarised in Table 1 below.

Table 1: Performance in supply interruptions where step-change in performance level is required in relation to cost adjustment claims

	2018-19 performance	Step-change improvement to 2025 required in DD	Representation on costs
Supply Interruptions	Upper Quartile	c.50%	Accept case for enhancement funding

We have commissioned a study by Reckon, jointly with other companies, on a proposed approach to implicit allowances relating to enhancement operating expenditure. This is included in full as Appendix C11.1.

In summary, the paper sets out the concept of enhancement operating expenditure, uses simulation analysis to illustrate how implicit allowances relate to that expenditure with an explanation of how they can be categorised, and sets out options for how Ofwat might deal with the concept in its determinations.

Also we previously commissioned a study by Reckon, jointly with other companies, on a proposed approach to enhancement operating expenditure. This was included in full in our IAP response as Appendix 13.

In summary, the previous paper sets out policy issues associated with enhancement opex, deficiencies in the way Ofwat's IAP dealt with that opex and potential remedies. Whilst some of those have been adopted by Ofwat to some extent in the draft determinations, there remains a significant issue regarding the performance levels covered by base allowances and those achievable with enhancement opex.

Reckon go on to explain how they “do not see any general case for thinking that the implicit allowances from the historical models of base costs cover the costs of delivering performance levels beyond the industry-average levels of performance (assuming no explanatory variables for the relevant aspects of performance are included in the models).”

Further, “in the absence of evidence and analysis that relates directly to a given aspect of service quality or environmental performance, we propose that the implicit allowances for base costs should be understood as funding a level of quality/performance that is the industry-average over the historical period covered by the data used for the modelling. We feel that this is the natural assumption in the absence of further evidence, given the statistical properties of the models and the allowances derived from them.”

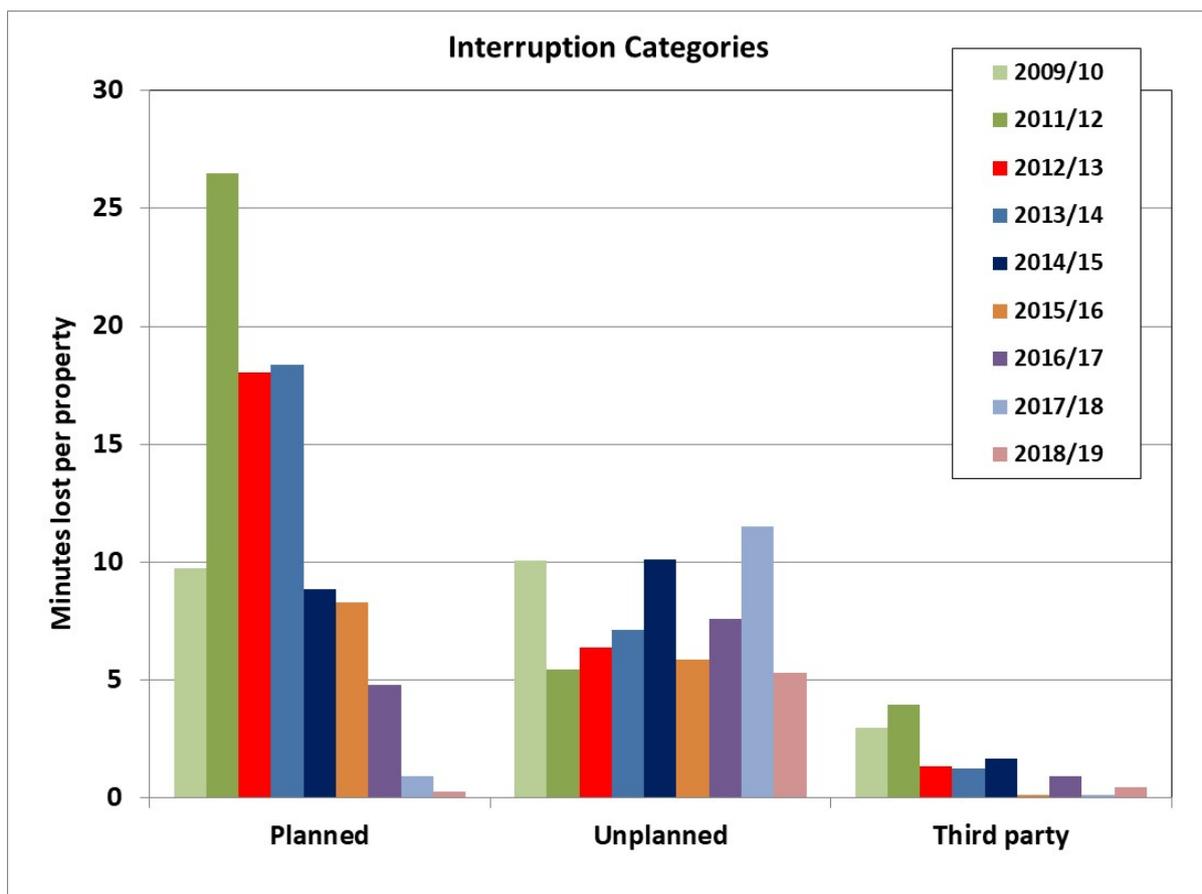
2) Supply interruptions

This measure includes all types of interruption greater than three hours, normalised by the number of properties supplied:

- Planned – where customers are pre-warned that we need to interrupt their supply to carry out essential work
- Unplanned – e.g. due to bursts and pumping stations malfunction
- Third party e.g. interruptions caused by other utility contractors damaging our mains, which is only partially within our control.

The graph below shows that the vast majority of the reduction in interruptions achieved over the last ten years has been in the planned interruptions category; this has been achieved by using new techniques that enable us to carry out work on the distribution system without interrupting supply for longer than three hours and improved customer relationship management.

We have also worked with external stakeholders to reduce third party interruptions which has also had some success.



The level of unplanned interruptions varies year on year based on the number and nature of a relatively small number of larger incidents than can occur in any one year.

The majority of past improvements were delivered through reducing planned interruptions close to zero. The future challenge is to reduce the unplanned interruptions category.

In order to achieve the target of three minutes we need to make a step change in performance requiring investment in new systems and processes as detailed in *Supporting Document 4.1 - Providing resilient services* and in *Appendix 4.1.C – Stantec review of supply interruptions reduction programme*.

This is a particular challenge for us as a significant proportion of our population lives in rural areas, often with only one pipe supplying the village. We have a very large network, with a total length of over 11,000 km, covering a largely rural area. The largest conurbations are only medium size towns and cities such Poole, Taunton, Yeovil and Bath.

We are in the process of changing the way we work, based on our experience that the first 30 minutes of any incident is critical in determining the response and the impact of the incident. Currently, out of normal working hours, when over 80% of interruptions occur, the initial assessment is completed by the distribution inspector when he or she arrives on site, after having been called to site by our control room.

We propose to provide a central team that is able to determine rezoning options, provide customer support and act as an incident manager. This will enable the analysis to be carried out while the distribution inspector is traveling to site, saving valuable time and helping to ensure a better outcome. As well as changing the way we work, we propose to:

- **Improve our 24/7 response capability.** We plan to increase the number of staff in our control room to provide 24/7 cover for an “always on controller” who with enhanced corporate systems can ensure we have the optimal response to any incident regardless of when or where it occurs. We also plan to increase standby out of ours cover to ensure we can access more resources to deal with an incident out of normal working hours.
- **Improve our real time data and knowledge management.** Parts of our network have limited flow and pressure data with data only updated every 24 hours. Our first warning of a supply interruption is often when the customer calls to say they have no water. We will install live data monitors to alert us before customers experience a loss of service, managed through a data analytics and visualisation system.
- **Identify enhanced interconnection.** The more interconnection options that we have the greater chance we have of restoring supplies to customers quickly. We will increase in our network modelling capability, focused on exploring options to enhance the interconnectivity of our system.
- **Increase equipment.** We will procure additional equipment and train our staff in their use, including network infusion by pumping into the network from a tanker, to maintain supplies.
- **CALM networks.** All our staff will be trained to ensure that they can operate valves without causing pressure transients, which can damage the network. We will extend this to other sources of transients such a commercial customers and other users of the network.

- **Operational modelling and drain down analysis.** We already have good coverage of hydraulic models of our network for planning and design of network improvements. We plan to make more use of these models for post event recovery, rezoning assessments and mobile tanker deployments.

We have to invest to deliver these capabilities. They cannot be delivered for free.

We included £13.9m as enhancement expenditure (capex £7.1m and opex £6.8m) to deliver the step change in supply Interruptions performance. The costs to achieve this service improvement are incremental totex over and above our current baseline business as usual expenditure. A breakdown of these costs is provided in Table 2 below.

Table 2: Breakdown of additional costs

Description	Opex £m/yr	Capex £m/yr	5 Year Totex £m
Always on controller	0.36		1.8
Real time data & knowledge management		0.36	1.8
Increased equipment	0.20	0.10	1.5
Increased standby	0.19		0.95
Network Infusions	0.20	0.30	2.5
Improved interconnection modelling	0.20	0.41	3.05
Operational modelling	0.18	0.18	1.8
Drain down analysis	0.09		0.45
Total	1.42	1.35	13.9

We obtained an independent external review of the proposals and costs from Stantec to support the proposals, and benchmarked the costs in the same way as the remainder of our enhancement programme.

Why the change is in customers' interests

The change will enable us to deliver the improved performance, which customers have indicated is a priority for them.

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

PR19 business plan submission in September 2018

- Supporting Document 4.1 - Providing resilient services
- Appendix 4.1.C – Stantec review of supply interruptions reduction programme.
- Appendix 3.1.A Performance commitment detail

Response to Initial Assessment of Plans March 2019

- Appendix 3 - Updated Performance Commitment detail document
- Appendix 12 – Securing long-term resilience : Response to IAP. Section 5.

New

Appendix C11.1 Third party report – Reckon. Covering a discussion on implicit allowances relating to enhancement operating expenditure.