

# Severn Trent Water draft determination

Company response

24 May 2019

## Contents

### Executive summary

---

#### Appendix 1: Securing cost efficiency

- Overview of totex and cost assessment
  - Business rates
  - Developer services
- 

#### Appendix 2: Delivering outcomes for customers

- Introduction
- Supply interruptions
- CRI
- Mains repairs

##### *Technical points*

- Shadow reporting on convergence measures
  - Calculation of the closing SIM ODI position for AMP6
  - Definition of performance commitments
- 

#### Appendix 3: Technical issues

- Introduction
  - Financial modelling
    - Revenue profiling
    - Assumed proportions of new to embedded debt
    - Retail modification factors
  - IAP/DD actions
    - Our response to action SVE.CMI.A2
    - Outstanding IAP actions in relation to PR14 reconciliations
    - Next steps for actions relation to the Severn to Thames Transfer Scheme
    - Commentary for data table App26
- 

#### Supporting documents:

- Updated version of App26
- Updated version of App1
- Updated version of the financial model
- Updated action tracker

## Executive summary

We're pleased by Ofwat's recognition in its initial assessment of business plans (IAP) and more recently, the draft determination (DD) of the work we've done in our 2020-25 Business Plan to:

- gain new insight about our customers;
- further our social purpose;
- create new and innovative performance commitments; and
- expand the use of incentives to unlock more for our customers.

Throughout the PR19 process, from the development of the methodology to the DD, we've appreciated Ofwat's very constructive and open approach to engagement. We also recognise that as a fast track company we must show sector leading behaviours. So it's in this spirit that we've approached our DD response by limiting it to a small number of issues which we've raised because they're:

- material issues that we raised at the time of the IAP or have emerged through the DD; or
- have an impact beyond Severn Trent and PR19 and are therefore fundamental to delivering good outcomes for customers in the long term.

We have also raised a number of minor technical points for completeness.

To support your teams' assessments of our response we have structured it according to the test assessment areas used in the IAP. In the enclosed appendices we provide more detailed analysis and consistent with this, the remainder of this letter first discusses securing cost efficiency and then turns to delivering outcomes for customers.

### Securing cost efficiency

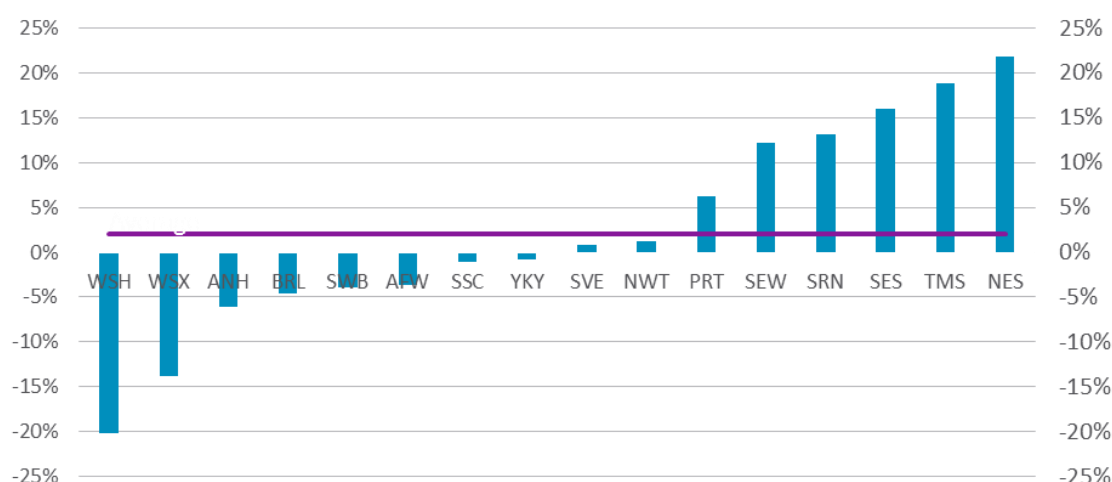
During the course of our discussions about the IAP we raised specific issues about the treatment of costs for two issues relevant to the entire industry: business rates and developer services. In our response we provide additional evidence setting out our views and, importantly, practical solutions that we believe will deliver better outcomes for customers in the short and long term.

### **Business rates**

We're concerned that the approach for business rates in the DD does not set a good regulatory precedent, and we believe represents a step backwards in terms of efforts to address the risk of windfall gains from changes in tax policy (and interest rate movements).

The simple estimation approach applied assumes every company will face a broadly similar change at the next valuation in 2021. While this might be reasonable at an aggregate level, analysis of the last revaluation shows this is not the case at a company level, with the impact ranging from -20% to +22% for individual companies, as illustrated overleaf.

**Figure: change in business rates at the last revaluation (2016 to 2017)**



By assuming similar growth levels, some companies could experience windfall tax gains. This could result in some customers paying £20 or more over the AMP. A more equitable approach would involve updating the Rateable Values using the Valuation Office Agency's methodology, with companies absorbing the risk of a change to the multiplier. An alternative or supplementary option would be to establish a business rates true-up mechanism at 2024/25 based on 75:25 sharing, with customers bearing the majority of risk for an item that is largely outside management control (which is consistent with the National Audit Office's recommendations following its review of economic regulation of the water sector).

### Developer services

The DD applies a challenge on cost and recovery rates for developer services that implies we should reduce our associated costs and revenues by 45%. The consequence is that either our developer charges should be 45% lower (which would be below all other market participants and therefore could create competition law issues); or we could adjust for this by reducing charges to other customers, which would likely trigger penalties under the Revenue Forecasting Incentive, and run contrary to Ofwat's stated position that companies should not attempt to alter this revenue to correct for imbalances elsewhere.

While a hugely complex issue, we believe this outcome is ultimately a consequence of poor quality data submitted by the sector and Ofwat using a single cost model rather than individually assessing the three developer services activities. The latter is important because each of the three areas are subject to different cost drivers, different competitive conditions, and different charging arrangements. This could be addressed with three steps, taken together:

- split the developer services unit cost model so that the unit costs of connections, requisitions and reinforcement are assessed separately;
- run the three cost models using the data from the recent industry query (CE-02); and
- include a simple 'true up' mechanism that allows for variances between the forecast activity that underpinned the developer services revenue allowance and the actual activity in AMP7 (and which are not captured by the volume true-up).

### Botex modelling

When we accepted fast-track status, we also accepted Ofwat's cost modelling 'in the round', subject to the points referenced earlier, even though the justification for some of the challenge was limited, for example:

- in reviewing our cost allowance we identified some schemes were excluded from the enhancement assessment despite having support from the DWI or were part of WINEP3; and
- the botex models did not address all of the points we believe should be covered, such as the specification of the water treatment complexity explanatory variable.

We continue to support Ofwat's approach to cost modelling and overall consider it has been a success, generating botex and retail models that cover the fundamental cost drivers and yet remain 'sensibly simple' and intuitive from an engineering, operational and economic basis.

We are interested, therefore, about how Ofwat might respond to recent issues raised by companies about botex modelling and the discovery of new explanatory data (e.g. pumping stations), not least because:

- Ofwat undertook extensive industry consultation on the models and data before they were introduced – with over 523 wholesale data queries and issues generated before the models were published; and
- the models and explanatory variables have been developed and tested over an extended period including extensive engagement through 10 cost assessment working group sessions and a public consultation.

Caution should therefore be applied before making radical adjustments to cost driver choices or coefficients resulting from data revisions at short notice and made after it has become clear how information will be used.

This point is particularly important when thinking ahead to PR24 and the incentive properties of fast track status. Arguably no other price review has been as effective as PR19 in encouraging companies to show real ambition in relation to service and cost efficiencies for the benefit of customers. It is critical to the efficacy of the fast-tracking process, and to securing these outcomes for future customers, that the benefits of being fast-tracked at PR19 are not undermined or worse act as a limitation because slow track companies can put in more modelling changes and enhancement business cases.

### **Frontier efficiency assumptions**

One aspect of the cost assessment framework in which we had limited visibility until after the IAP results were published was the assumption of the 1.5% frontier efficiency shift. This is applied as an 'overlay' to the outcome of the cost modelling process.

We note there is an on-going industry debate, with IAP responses citing evidence which highlights issues with Europe Economics underpinning analysis. This includes, for example, John Earwaker's report: *A review of Ofwat approach to estimating PR19 frontier shift*, which calls into question the validity of the 1.5% assumption, not least because it ignores the slowdown in productivity growth that has been observed more generally in the UK economy since the financial crisis, with the Bank of England estimating a 0.3% productivity improvement going forward.

To the extent that this evidence leads to a change in assumptions, we think it is important that this does not create any procedural disadvantage to fast track companies.

### **Delivering outcomes for customers**

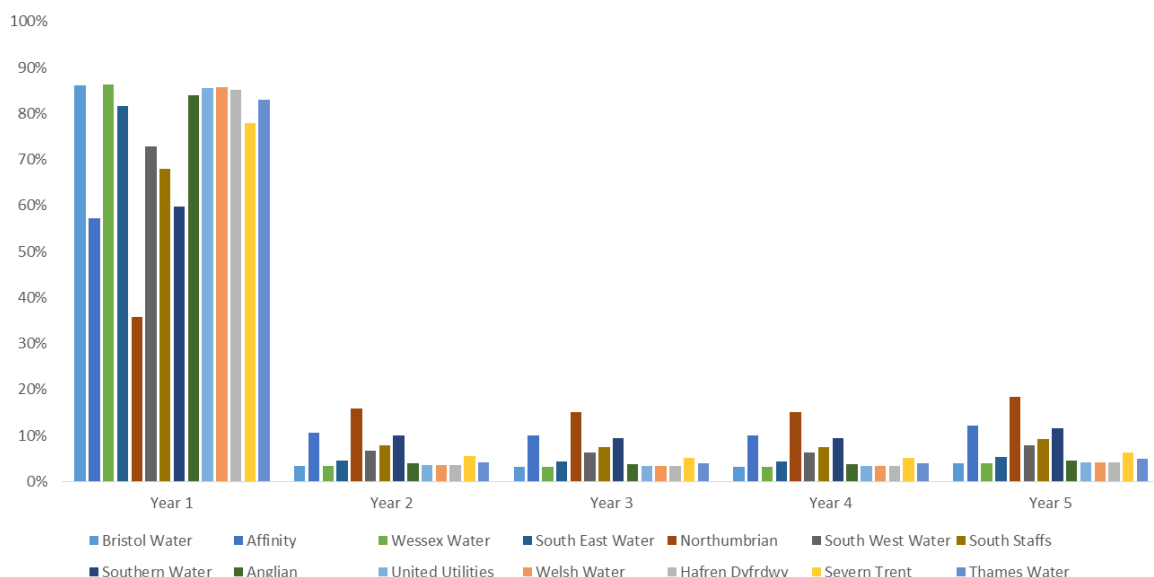
In our plan we committed to strengthening the use of incentives to deliver better outcomes for our customers, and created what Ofwat acknowledged in the DD was an innovative package, "*with strong protection for customers against failure to deliver*". At the IAP we opted out of the early certainty clause for the compliance risk index (CRI) and supply interruptions, and in the DD Ofwat has intervened to make our mains repair targets more challenging, which further alters the balance of risk in the package we put forward. We've focussed our comments on making these incentives work better to deliver sustained performance improvements, whilst addressing Ofwat's underlying concerns.

## Supply interruptions

We support the concept of the UQ ambition and the need for companies to continuously push forward the standards of service that we deliver to our customers. However, the use of the forecast UQ (3:00) raises significant concerns about deliverability given that the actual UQ has ranged between 06:18 and 07:24 in this AMP and has been driven by urban companies. In fact only one company has achieved less than 03:00 during that time. It therefore seems highly unlikely that this ambition – a 50% shift in UQ from 2019-20 – will be achieved by 2024/25.

This issue is exacerbated by the fact that around 75% of the improvement needs to be made in the first year, which seems implausible, and thereafter the PC is designed to deliver close to a 5% improvement, as illustrated below. This contrasts with the two other UQ common measures where improvement of one-third is required in the same period.

**Figure: proportion of improvement required annually by company**



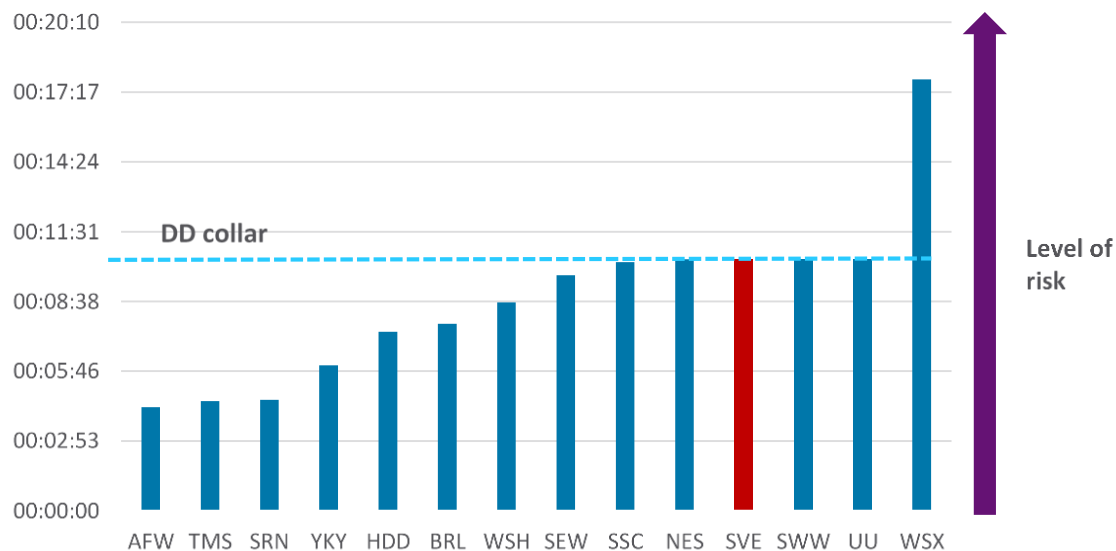
It is also apparent that the best performing companies are those that can easily re-route supplies (e.g. city based) and weaker performers are those with large proportions of their populations in rural regions with very hilly topography with networks that have longer pipe lengths with fewer valves, less interconnectivity, higher water pressure and reduced accessibility to assets.

The lack of a glidepath, in combination with such an ambitious target, risks not only being damaging to the reputation of the whole sector, but also discouraging companies from showing similar levels of ambition at future reviews – on what is essentially a question of phasing.

If the sector is to stand a chance of delivering and then *sustaining* such an improvement for customers, then we need to make sure that the incentives are effective. Changing the glidepath is essential. Applying a glidepath, from 2019/20 outturn to the 2024/25 UQ, would mean the same level of performance for customers is being delivered by 2024/25 but in a more realistic profile. Such an approach would also offer consistency in principle with how Ofwat has approached totex – by taking into account historic performance, and then applying an additional consistent efficiency challenge.

We also think that a more standardised penalty collar should be applied, consistent with the approach applied to CRI. In the DD, our penalty collar has been set above the collar put forward by a number of other companies, meaning they face significantly less risk. This position has been exacerbated by revisions to slow track plans whereby the majority of companies now face significantly less risk than the three fast tracked companies (as defined by the difference between the proposed target and the proposed collar) – illustrated below.

**Figure: company exposure to risk**



In the light of the significant variations between companies' targets and collars, we believe the collars should be standardised to ensure a fair balance of risk and reward. Assuming the target doesn't change for other companies, this would involve setting the collar at the UQ of the revised submissions – which is 12:30. If the targets do change then we believe the collar should be set to deliver a consistent level of risk (ie, the same difference between target and the collar).

## CRI

The introduction of CRI is an important evolution in water quality regulation. The change from mean zonal compliance to CRI is intended to drive performance in a dynamic way. It is designed to drive positive behaviours to identify and respond to emerging risks, rather than waiting for legislative change to catch up and mandate compliance. The DWI has recognised that the time and cost required to reverse any trends will vary and has said companies should press for performance that is *'equal to or below [better] the national average'* (4.34 over the past 3 years).

We understand the rationale for setting a target of zero to ensure that all companies strive to eliminate risk, and we've accepted that the CRI will be penalty only. However, a deadband at 1.5 risks having the unintended consequences of:

- unduly undermining customer confidence in what is the best drinking water quality in Europe (80% of companies would have failed the deadband as it stands over the last three years); and
- distorting incentives (as too strong a focus on penalties does little to encourage the proactive identification of risk or innovation to change customer behaviours).

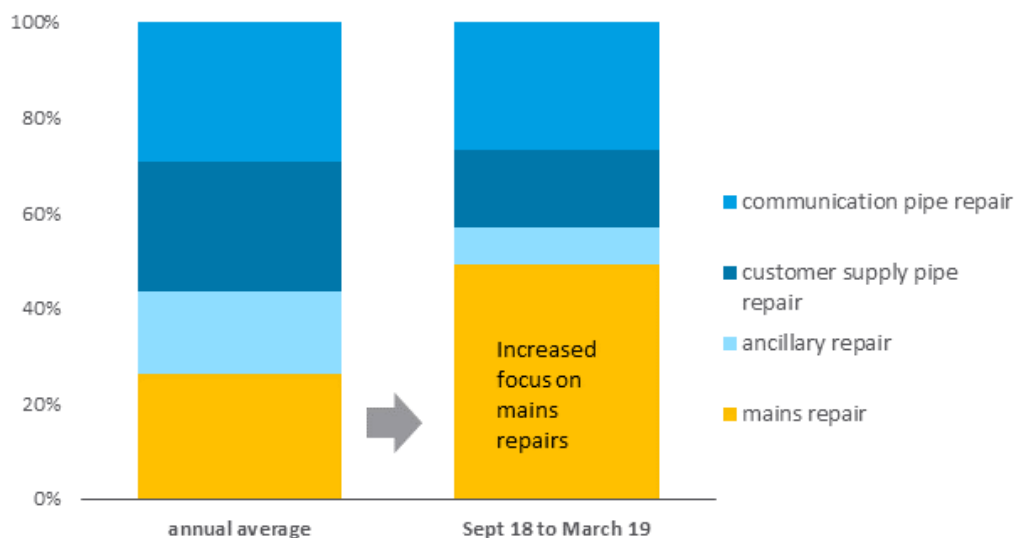
The deadband appears exceptionally narrow when the nature of the measure is put into context. Risk exposure varies across the sector with factors such as system configuration (e.g. those with fewer, large works are at risk of one failure driving more volatility) and risks inherent in different regions (e.g. there are between 50 and 100 possible pesticide parameters which vary by region), and a number of elements are outside direct management control - some of which require changing customers' behaviours. These issues are exacerbated by the imposition of a penalty rate that risks being unduly strong not only in the context of the DWI's enforcement powers, but also compared to the range for other measures as where Ofwat has intervened to set incentive rates, CRI has been set at 36% below the average, whereas for supply interruptions the rate has been set 53% below the average.

These issues could be addressed through some straightforward changes. By broadening the deadband to the national average of 4.34 and adjusting the penalty rate, Ofwat would strike a better balance between encouraging innovation in changing customer behaviours, finding and driving down risk and rightly taking action against non-compliance.

### Mains repairs

Mains repairs has an important role in our overall toolkit to manage our network and deliver our performance commitments across leakage and other measures like low pressure. Our data demonstrates that we carry out over 200 repairs to deliver a 1 MI/d reduction in leakage and that a quarter of the leakage reduction is driven by mains repairs.

**Figure: activity to drive leakage reductions**



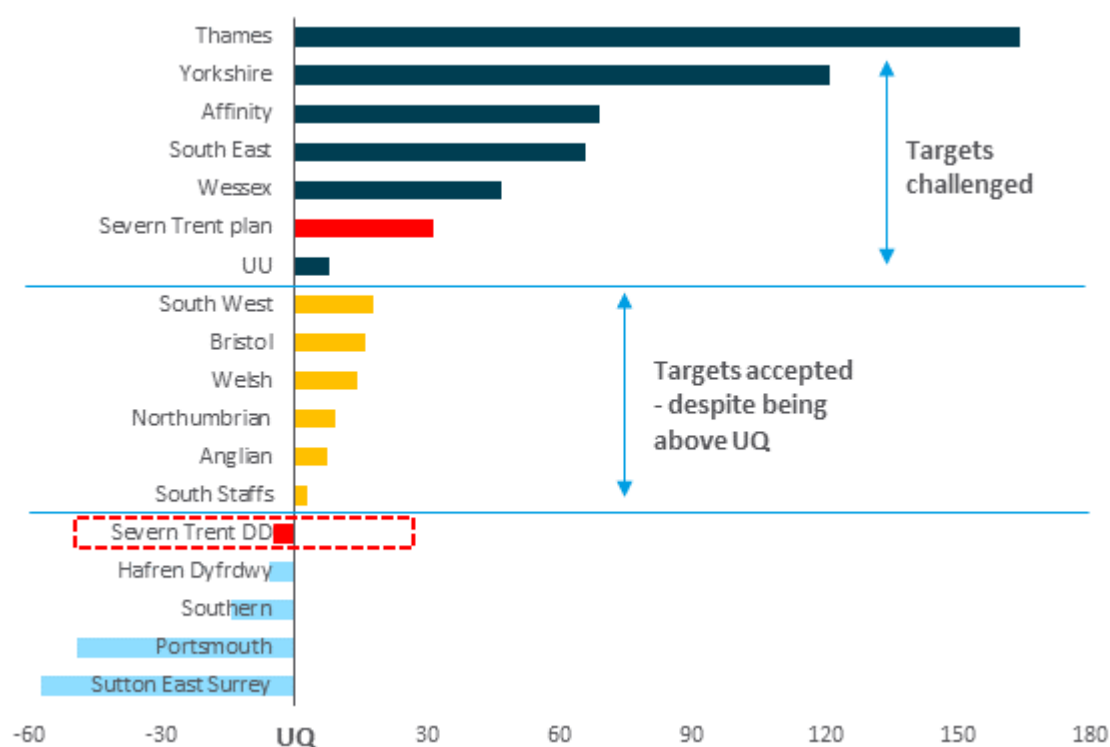
The figure above also shows that during September 2018 to March 2019 (following the freeze/ thaw and prolonged hot summer), we increased the number of mains repairs to both address the increased breakout rate caused by the weather events and to drive further leakage reduction to ensure delivery of our leakage target. During this seven month period mains repairs represented 50% of the leakage reduction volume. To ensure that we can deliver the most cost beneficial solutions to reduce leakage, it is important that we're not penalised for the number of repairs we can undertake.

The DD constrains our flexibility by setting a target with no headroom for additional repairs, which is compounded by the fact that our historical performance is better than upper quartile. While we recognise that our September proposal would have resulted in our repairs increasing and being above the UQ and marginally higher than the sector average performance, many other companies had targets accepted that are above the



UQ and well above our DD position, as illustrated below. This means they have more headroom to manage annual variation and more flexibility to use mains repairs to drive leakage reduction.

**Figure: AMP7 mains repairs rates compared to UQ**



To ensure we have the necessary tools to deliver a reduction in leakage, it is important that we've the flexibility to repair more mains. We also think from a procedural perspective it's important that we and other fast track companies are afforded an outcome that is no more onerous than others in the sector. We therefore propose that our targets are set as the average of the accepted targets that are above UQ (i.e. the average of the amber companies above - 127/ 1000km).

We also recognise that setting a mains repair target above our current average level of performance (112/1000 km) raises the risk that we could earn rewards by simply changing our mix of leakage solutions. Rather than setting a target that restricts our ability to repair leaking mains, this risk could be better addressed by introducing a reward deadband between our revised target (127 / 1000km) and current performance.

#### Other technical points relating to outcomes

In addition to the material points noted above, we've also included some technical points relating to outcomes:

- an update on how improvements in our reporting processes for shadow performance measures have impacted the baselines and forecasts reported in our plan (consistent with the guidance in our DD);
- our proposal, as set out in our response to action SVE.OC.A21, to introduce a collar for unplanned outages, consistent with the approach used for South West Water;
- clarifications on the definitions of four performance commitments; and
- an updated assessment of our SIM incentive for AMP6, based on new information published by Ofwat since the submission of our plan and in recognition of SIM being incomplete in our DD.

### Other technical points

Our response also includes a number of other technical points, the most significant of which include:

- setting our bill profile consistent with our plan, which delivers a larger bill reduction to customers than the DD;
- our concern that the underpinning assumption of the ratio of average new and embedded debt in Europe Economics analysis is inconsistent with PR19 business plans;
- proposals for minor adjustments to retail modification factors to ensure they are consistent with the PR14 Final Determination for the Severn Trent and Hafren Dyfrdwy following the NAV process;
- the closedown of action SVE.CMI.A2 in relation to bioresources;
- clarification on the next steps in relation to the Severn to Thames Transfer Scheme; and
- a note to confirm that this response is being written in the context of PR14 reconciliations being completed by 15 July as requested.

Finally, we welcome any clarifications or queries Ofwat may have on our response. Our dialogue on what are sometimes very challenging and complex issues for our sector has always been open and constructive, and we look forward to continuing this in the closing months of the price review.