Appendix 3:

Technical issues

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1. Introduction

In this appendix we respond to two types of issues – those that are relevant to the running of the financial model and those that relate to IAP actions. These points can be summarised as follows:

- financial modelling:
  - revenue profiling – we have proposed a small change to the profiling to achieve a bill profile similar to our plan;
  - the assumed proportions of new and embedded debt – we set out additional data about the proportion of new to embedded debt in response to the Europe Economics report;
  - retail true-up – we respond to the intervention to change the retail modification; and
  - financial model (attached separately); and
- IAP actions:
  - Bioresource – our response to action SVE.CMI.A2 PR14 reconciliations;
  - a note on outstanding actions relating to PR14 reconciliations;
  - RoRE - commentary for updated data table App26; and
  - update on IAP action SVE.CE.A2 - Strategic regional solution.

2. Revenue profiling

In our September plan we proposed a bill profile which provided customers with a large reduction in the first year, stable bills for three years with a further drop in the final year. The profile, which was accepted by 85% of our customers, achieved the right balance of delivering broadly stable bills over the period with a lower bill at the end of the period. The revenue profile in our plan also smoothed the profile of key metrics over the period to minimise the increase in the RCV run off rates required to maintain our target credit rating of BBB+/Baa1.

The draft determination (DD) has made a small change to our AMP7 bill profile – whereby there is a drop in year 1 and then bills are held steady thereafter. This has the effect of delivering a smaller bill reduction over AMP7 compared to our plan profile.

Given the high level of customer support for our original profile, we would like the DD revenues to be re-profiled to achieve a bill profile similar to our plan. The profile would also result in the same 5% headline bill reduction as put forward in our plan. This is set out in the table below.

To support this adjustment we have updated the DD financial model with the above proposed revenue profile, which is attached.

Bills in real terms

	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Change in bill
Business Plan	£345	£330	£334	£335	£333	£327	-5.0%
Draft determination	£345	£330	£330	£330	£330	£330	-4.4%
Proposed profile	£345	£326	£330	£333	£333	£327	-5.0%

The bills in the table have been calculated using the conventional method of dividing total household revenue for each service by the number of customers billed for that service which was the methodology used in our plan.

3. The assumed proportions of new and embedded debt

Ofwat's early view of the WACC included the assumption that, on average during 2020-25, 30 per cent of all debt will be 'new' and 70 per cent 'embedded'. That marked a significant change from PR14 and previous reviews, where Ofwat has consistently assumed that 25 per cent of debt would be 'new' on average, based on its analysis (at each control) of likely profile of company new debt requirements for refinancing and to support RCV growth.

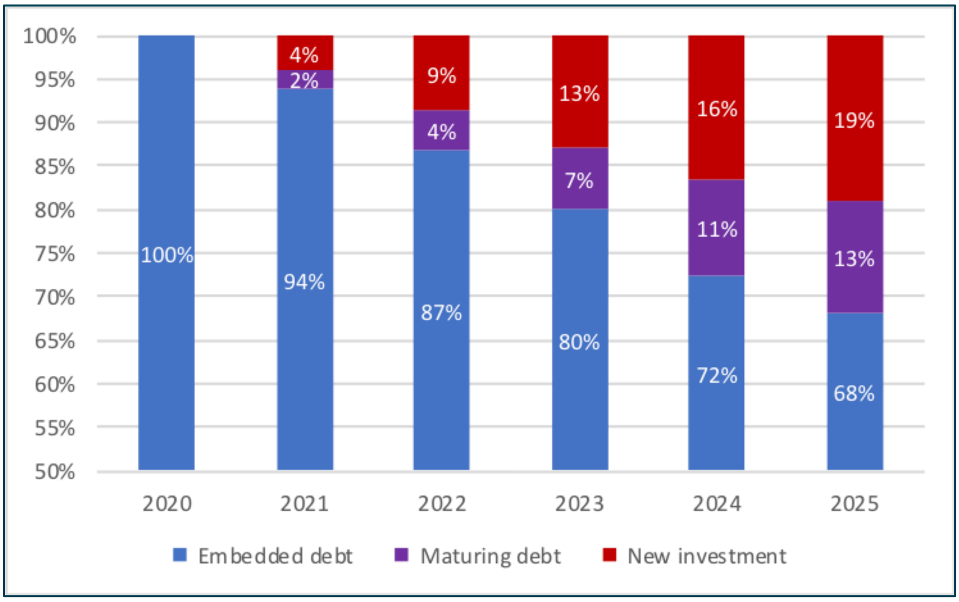
The 30 per cent average assumption used in Ofwat's early view of the PR19 WACC was based on Europe Economics' analysis of company debt data, together with an extrapolation of RCV growth. However, as we set out in our Business Plan (p256-7), we have been unable to evidence how Europe Economics arrived at the view that 30 per cent is appropriate, and in fact <u>both the method and the results presented by Europe Economics look to be unreliable as a basis for setting the WACC</u>.

For example, p68 of the Europe Economics report states that *"Combining the amount of debt that will need to be raised to refinance debt that matures before March 2020 and the amount of debt that will need to be raised to finance new investments, we obtain the total amount of new debt to be raised in 2020-25 period"*. However the amount of debt that will need to be raised to refinance debt that matures before March 2020 does not form part of the total amount of debt to be raised in the 2020-25 period. Rather, at the start of the 2020-25 period, it is embedded debt (as Europe Economic recognises elsewhere in its report: for example, in its approach in Section 9.1.1).

Whatever method Europe Economics used (and, as noted above, that was not made sufficiently clear), in our view the 30 per cent average figure is clearly too high. We note that in responses to Ofwat's IAP, a number of other companies have highlighted similar problems. Additionally when the CMA addressed this issue at PR14 it considered it appropriate to use the industry average when setting the proportion of new and embedded debt in its determination of Bristol Water's PR14 appeal.[1]

Our analysis of company business plan submissions indicates that the average proportion of new debt over AMP7 is expected to be around 20 per cent: that is, significantly lower than the 25 per cent level assumed by Ofwat in past reviews (and a third lower than the proportion proposed by Europe Economics).

Expected average company proportions of new debt during AMP7



Note: Severn Trent calculations based on company business plan submissions.

[1] CMA (October 2015) Bristol Water plc: Final Report, p322.

As can be seen in the graph, our analysis shows that 32 per cent of company debt is expected to be new by the end of AMP7, but since there is (by definition) 0 per cent new debt at beginning of the control, the average proportion of new debt during AMP7 will be much lower than this end position.

In its Final Methodology, Ofwat stated – in relation to its use of the Europe Economics based 30 per cent average new debt figure - that: *'We will revisit this assumption once the companies have submitted their business plans and we have a better view on the future investment requirements across the sector' (p73).*[2]

The assumed average proportion of new debt has a material impact on the WACC calculation. It is also an important component of the new cost of debt true-up calculation, which was introduced to address feedback from the National Audit Office review. An inaccurate estimate of the amount of new debt to be indexed could undermine the intent of the index mechanism. As has been shown above - the Europe Economics' assessment does not provide a robust basis for determining this matter.

Ofwat is due to update its view of the cost of capital for the Draft Determinations for the non-fast-tracked companies in July 2019, and we consider it essential that the proportion of new and embedded debt to be assumed is re-assessed as part of that process. In line with Ofwat's commitment in its Final Methodology, that reassessment should take account of the better view of future investment requirements that is now available following company business plan submissions. Based on the available evidence from the September plans this indicates c~20% of debt would be new, however we appreciate that the final result will depend on how companies respond in the IAP and subsequent decisions from Ofwat about enhancement spend.

4. Retail modification factors

In the DD, Ofwat made an intervention to alter our retail modification factors, resulting in a reduction in the revenue requirement. This would technically breach our licence, since the revenue requirement is enshrined by the PR14 Final Determination.

The retail modification factors were part of our PR14 Determination. The household retail control was set as a fixed amount of revenue per year, modified for any difference in customer numbers. An amount of additional revenue for customers of each type was part of the Determination, and was written into the company licence.

The intervention was described In the Past Delivery actions and interventions appendix (SVE.PD.C008.02 and SVE.PD.C008.03) describe the intervention, which has the effect of:

- replacing the separate retail modification factors for Dee Valley and Severn Trent with a weighted average for each type of water customer; and
- allowing less revenue than would have been calculated if the adjustment factors had remained at their original rates.

While the overall effect of this change is relatively small (£0.25m), the retail modification factors are part of the determination, and part of the licence. After the border variation, the licences of Severn Trent and Dee Valley were updated to reflect the separate modification factors that should apply in areas formerly served by each of the legacy companies. This is laid out in the updated table 4 of Condition B.21, which Ofwat published on its website. This means we have multiple retail modification factors – unlike every other company.

While our original calculation of the retail adjustment in our PR19 Business Plan did not fit into Ofwat's standard model, this is a consequence of the licence variation and subsequent Determination of multiple retail modification factors. This was done to ensure every customer was in the same position as they would have been if the border variation did not take place.

[2] Appendix to Chapter 10: Aligning Risk and Return, December 2017.

Accordingly under the terms of our licence we have to comply with all of the relevant modification factors. In our Business Plan the calculation satisfies this requirement and ensures that all customers are in the same position as they would have been if the border variation had not taken place.

The decision being applied in the DD does not satisfy that principle. It would change the retail modification factors and the resulting revenue allowance for AMP6. This would breach our licence. Charges for 2019-20 have already been set to recover revenues based on the PR14 Final Determination, and the DD decision would effectively change that determination.

From a position of principle, we do not consider it appropriate to change the retail modification factors in a way that deviates from the PR14 Final Determination and the licence, particularly after charges have been set.

5. Our response to action SVE.CMI.A2 (bioresources)

In the IAP, Ofwat raised the following action:

"The proposed split of fixed and variable revenues for the bio-resources revenue control has not been sufficiently evidenced. We are intervening to ensure that the bioresources revenue adjustment is set on a broadly comparable basis across companies based on information set out in the business plan tables. Our view will be set out in the draft determinations."

We note the updated position in the DD and have no further comments.

6. Outstanding actions relation to PR14 reconciliations

A number of the detailed interventions in the DD also relate to PR14 reconciliations. In line with outstanding actions SVE.PD.A1 to A7, we will be providing updated reconciliation tables and further evidence with our Annual Performance Report submission by 15 July 2019.

7. Update on IAP action SVE.CE.A2 – Strategic regional solution

We submitted a response to our IAP action for the above scheme on the 3rd May. This included our latest view on the ODI mechanism (in an APP1 table) and the 'shovel ready' scheme costs for the joint and company specific components. Our view on costs and incentives has not changed since that time and absent any feedback we have not included any further information in our Fast Track Draft Determination representation.

As we and United Utilities are working to the timescales of our slow track partner for this scheme, our understanding is that we will have an opportunity to respond feedback on our May submission by 30 August 2019 (via the slow track route).

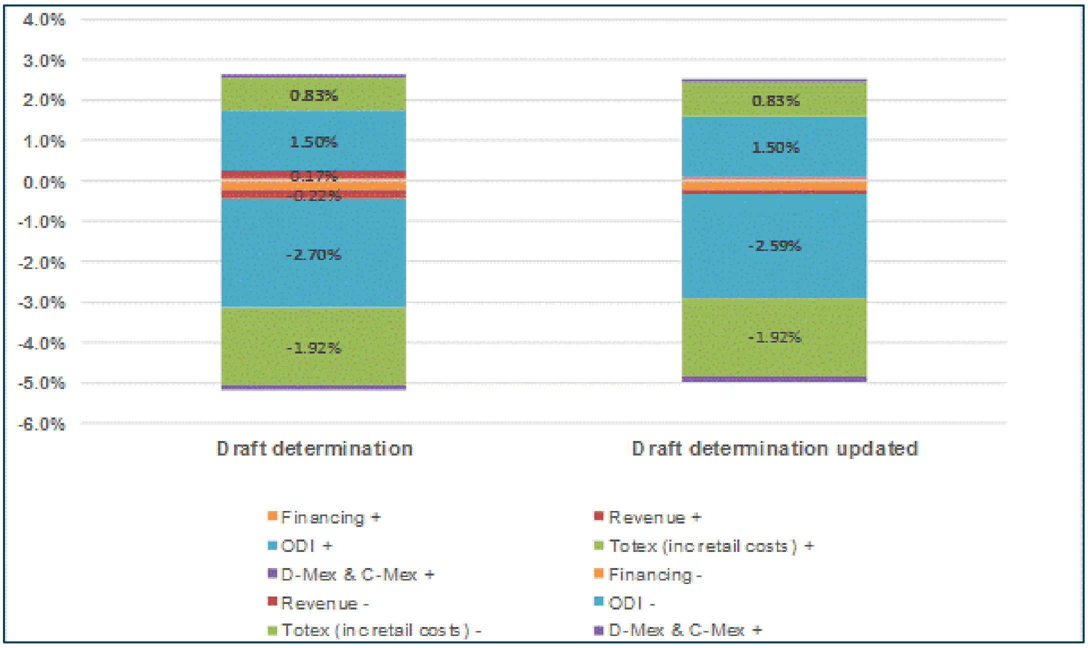
8. Commentary for data table App26

We have updated table App26 in line with our response to the DD, including the ODI related changes set out in our response for:

- ODIs – water supply interruptions, CRI and unplanned outages;
- C-MeX; and
- Bioresources revenue.

Crucially, our DD response has only a very minor impact on the RoRE ranges. This can be seen in the overall range which is now +2.53% to -4.97% – a marginal change from the range of +2.63% to -5.16% as per the Ofwat DD.

RoRE range and its components



For water supply interruptions, the P10 financial impact takes account of a penalty collar at 12:30 (the industry UQ level) and a penalty deadband that provides a glidepath to UQ performance over the AMP. For CRI, the view of P10 performance incorporates a deadband at 4.34 points (the industry's average level of performance over the last three years). Similarly, we have updated the P10/P90 confidence levels for unplanned outages to reflect the changes we made in our resubmitted App1 table on 15 May. The overall impact on the ODI RoRE range is the downside increases by 0.11% but the upside remains unchanged.

On CMeX, we have revised the assumptions used in our plan to align the P10/P90 performance levels to the full amounts at which the standard reward/penalty would apply. The change results in a marginally wider C-Mex RoRE range of +0.07% to -0.11%.

We have also updated the revenue variation assumptions for the bioresources control to align to the DD view of the proportion of revenue which will cover fixed costs. This results in reducing the RoRE range for revenue variations to a range of +0.02% to -0.08%.

As part of our response, we have updated the DD financial model with the above changes.