Delivering Water 2020: Our final methodology for the 2019 price review
Appendix 11: Securing cost efficiency

Appendix to Chapter 9: Securing cost efficiency

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1. Summary

This appendix sets out our final methodology for PR19 with respect to securing cost efficiency. We have determined this methodology after fully considering the views expressed by respondents to our draft methodology proposals, published in July 2017.

This appendix supplements chapter 9 (securing cost efficiency) of our final methodology for the 2019 price review (PR19).

Applicability to England and Wales

Our final methodology for securing cost efficiency applies to both companies whose areas are wholly or mainly in England and companies whose areas are wholly or mainly in Wales.

Our final methodology for business retail applies only to companies whose areas are wholly or mainly in Wales, and those water companies whose areas are wholly or mainly in England who have not exited the business retail market by the time we set price controls. (As at December 2017, a small number of water companies in England for whom we intend to set price controls have not exited the business retail market.) More information on the scope of the business retail controls can be found in chapter 8 of our final methodology.

This appendix is structured as follows:

- a cost sharing incentive to submit efficient business plans (section A2);
- funding unconfirmed environmental requirements (section A3);
- adjustments to our cost baselines (section A4);
- our approach to retail controls (section A5);
- a transition expenditure programme for 2019-20 (section A6); and
- other cost items (section A7).

Section 8 of appendix 15 outlines respondents’ views to the seven questions we posed on securing cost efficiency in our draft methodology consultation. In appendix 15, we provide (or reference) our response to the issues raised by respondents.
2. A cost sharing incentive to submit efficient business plans

2.1 Our draft methodology proposals

Cost sharing rates are the proportion of a cost underrun that investors get to keep, or the proportion of a cost overrun that investors have to bear. Cost sharing ensures that customers benefit when companies outperform their cost allowances, while being partly protected when companies overrun their allowances.

In our price controls, we set expenditure and revenue allowances for companies in advance for the next five years. The future may unfold differently to our forecasts – cost sharing is an effective way to protect customers and companies against forecasting risks and inaccuracies. This protection against forecasting errors allows us to set more stringent cost baselines and a lower cost of capital, to ensure companies are incentivised to operate efficiently and that customers’ interests are protected.

Cost sharing allocates cost performance risk between customers and companies. It ensures that if the costs companies incur are lower than those we set at final determinations, customers will benefit from these cost savings through lower charges. Likewise, if companies incur higher costs than those we set at final determinations, customers will pay a proportion of such a cost overrun.

In our draft methodology consultation, we proposed using cost sharing rates not only as a risk sharing mechanism, but also as an incentive for companies to submit stretching, efficient plans for PR19.

To do that, we proposed setting cost sharing rates separately for outperformance and underperformance. We said that each cost sharing rate would be set as a sliding scale, so more efficient business plans will have access to more favourable cost sharing arrangements.

In our draft methodology consultation, we presented a simple mechanism. A company’s cost sharing rates were determined by the ratio of the total expenditure (totex) in its business plan to our view of efficient totex (‘the totex ratio’). According to the simple scheme, the sharing rate of outperformance (cost savings) increases by 0.5%, and that of underperformance (cost overrun) decreases by 0.5%, for a 1% reduction in the totex ratio.
We said that this simple calibration was for illustration only and invited views on alternative calibrations.

We proposed applying cost sharing only where we set a total revenue control, namely in the water and wastewater network plus controls and in the water resources controls. In bioresources and retail, which are average revenue controls, the cost performance risk is significantly lower because of the outturn volume adjustment. We therefore proposed no cost sharing in these controls.

We also said that the cost sharing rate would not necessarily be the same across all controls. In each control it will be based on the ratio of companies’ cost forecasts to our cost baselines.

**2.2 Responses to our proposals**

Most respondents were in favour of discontinuing with the menu approach.

A number of respondents raised a concern that our proposed cost sharing mechanism could provide a perverse incentive for companies to game the system by submitting low totex forecasts in their business plans, regardless of their true expectations of totex.

By submitting a low totex forecast, a company could gain access to a favourable cost sharing arrangement, with limited impact on its expenditure allowance. This is because under our proposed approach we will set efficient baselines based on benchmarking analysis and not directly based on a company’s forecast. This perverse incentive could have unintended consequences for customers, who would have to pay a higher share of cost overruns.

**2.3 Our final position on cost sharing**

We have adjusted the illustrative cost sharing rates we presented in our draft methodology proposals to better incentivise companies, better protect customers and mitigate perceived risks around gaming.

Figure 1 illustrates the cost sharing mechanism we intend to use at PR19 alongside the mechanism we presented in our draft methodology proposals.
Box 1 Calibration of the cost sharing scheme: algebraic expression

In the following expressions $R$ = totex ratio. This is the company’s view of totex, as submitted in its business plan, relative to our view of efficient totex. $R=100$ represents a ratio of 1.

Underperformance sharing rate = \[
\begin{align*}
&50\% \quad \text{if } R \leq 100 \\
&50\% + 1\% \times (R - 100) \quad \text{if } 100 < R \leq 110 \\
&60\% + 0.5\% \times (R - 110) \quad \text{if } 110 < R \leq 120 \\
&65\% \quad \text{if } R > 120
\end{align*}
\]

Outperformance sharing rate = \[
\begin{align*}
&65\% \quad \text{if } R \leq 80 \\
&65\% - 0.5\% \times (R - 80) \quad \text{if } 80 < R \leq 90 \\
&60\% - 1\% \times (R - 90) \quad \text{if } 90 < R \leq 110 \\
&40\% - 0.5\% \times (R - 110) \quad \text{if } 110 < R \leq 120 \\
&35\% \quad \text{if } R > 120
\end{align*}
\]
We have made two changes:

First we set the underperformance cost sharing line to be flat (that is, zero slope) for totex ratios of less than 100. Such ratios imply that the company’s view of totex is below our estimate of efficient totex. Companies that submit such forecasts expect to outperform our cost allowance. The purpose of this change is to make sure customers do not pay more than 50% of any underperformance in such cases; that is, to protect customers from poor or inefficient business planning.

The flat curve serves another purpose: it significantly reduces the scope to submit unrealistically low totex forecasts to get additional rewards through cost sharing. Companies will not have an incentive to submit low forecasts if they expect to underperform. This will also prevent a company unduly setting an unrealistic frontier.

Our second change was to strengthen the incentive to submit efficient business plans. We did this by increasing the slope of the outperformance and underperformance curves in a critical region around our central estimate of efficient costs (except for the region where the underperformance curve is flat). This will provide a stronger incentive to submit efficient business plans.

For companies with a totex ratio above 120, we will apply cost sharing rates as if the ratio was 120 – except if the company is categorised as ‘significant scrutiny’ in our initial assessment of business plans – in which case the cost sharing rates will be 75% for underperformance and 25% for outperformance.

For companies with a totex ratio below 80, we will apply cost sharing rates as if the ratio was 80.

This cost sharing mechanism is not yet final. Our current intention is to use this calibration at PR19. However, we will consider whether the calibration is still appropriate after our initial assessment of business plans. For example, we will consider whether a higher underperformance rate is appropriate for companies with inefficient business plans and whether it is appropriate to extend the cost sharing gradient above 120.
2.3.1 Equal cost sharing rates in the water resources and water network plus controls

For the water resources and water network plus controls, we will apply the same cost sharing rates: the same sharing rate for cost outperformance and the same sharing rate for underperformance.

The cost sharing rates in these controls will be determined by the ratio of the company’s view of the sum of water resources and water network plus totex to our view of the corresponding totex.

Setting the cost sharing rates based on the total expenditure across water resources and water network plus (that is, based on ‘wholesale water’ total expenditure) would incentivise a business plan that is efficient in the round. Setting cost sharing rates in this way recognises that there may be some trade-offs in expenditure between water resources costs and expenditure on the network plus business.

Setting the same rates would also ensure that companies are not unduly biased in favour of expenditure on one control over the other. Companies will remain incentivised to apply the most efficient solution for customers over the long term.
3. Funding unconfirmed environmental requirements

A large portion of enhancement expenditure, particularly in the wastewater network plus control, is driven by environmental requirements. The final version of the Water Industry National Environment Programme (WINEP) will be issued in England in March 2018, as will the National Environment Programme (NEP) in Wales. These will confirm whether some of these environmental requirements are definitely needed.

Other requirements, principally those driven by the Water Framework Directive (WFD), are not expected to be confirmed until December 2021 at the earliest. This means that these requirements will still be uncertain when companies submit their business plans to us in September 2018, and when we make our final determinations in December 2019.

This was an issue we faced at PR14, when decisions on the scale of the environmental programmes were not due to be made until a year after price limits were set. At PR19, the gap between our final determinations and the finalisation of the WFD’s programme of measures will be two years. This could mean there will be more uncertainty about the actions required of companies at the time we make our final determinations.

Evidence from PR14 suggests that for some companies the scale of the WFD’s requirements is smaller than companies allowed for in their business plans and we assumed in our final determinations. This highlights the risk that customers may pay for enhancement schemes that will eventually not be required.

3.1 Our draft methodology proposals

We consulted on how to protect customers better, given the uncertainty surrounding parts of the environmental improvement programme during the PR19 timeframe. We proposed two options designed to incentivise companies appropriately to manage the scale and costs of this programme.

- **Option 1** – make an allowance against a conservative forecast of the likely scope of the programme. This option is similar to the general approach taken at PR14, but with a more conservative forecast.
- **Option 2** – introduce a unit cost adjustment mechanism, linking expenditure against unconfirmed requirements to an outcome and unit cost.
3.2 Responses to our proposals

Many respondents acknowledged and supported the need to protect customers in the face of uncertain environmental requirements. Some remarked on the importance of sharing risk appropriately.

Despite the divergent regulatory timelines, there were mixed views as to whether the degree of uncertainty would be greater in PR19 than in the previous price review, and possible differences between England and Wales. For example, the Environment Agency stated that the environmental measures are more certain at PR19 than they were at PR14. On the other hand, Natural Resources Wales commented that many of the investigations scheduled to inform the 2020-25 environmental programme will not be reported by the time business plans are submitted in September 2018.

A number of companies considered that the approach taken at PR14 afforded customers enough protection. Two respondents commented that the examples we highlighted of differences between environmental programmes included in companies’ business plans and the final NEP were not representative of the industry as a whole.

Overall, companies were fairly evenly split in their preference between options 1 and 2. Those favouring option 2 often likened it to the PR14 ODI approach, which they saw as working well. The views among other respondents, including regulatory bodies, ranged from ambivalence to a strong preference for option 2.

3.3 Our final position on funding unconfirmed environmental requirements

At PR19, we have decided to amend our approach to funding unconfirmed environmental requirements. We will implement option 2: introducing a unit cost adjustment mechanism.

Under this option, we will set a cost allowance based on the full extent of the programme a company anticipates being required by 2025, if the company proposes an appropriate cost adjustment mechanism to be applied in the event of discrepancies in scale between the assumed and confirmed programmes.

Unless it is relatively trivial (for example, the cost of some investigations), expenditure against unconfirmed requirements will need to be linked to an outcome and a unit cost. We would use the unit cost to make an adjustment at the end of the
control period, based on the volume of work that is eventually confirmed as being required and delivered by the company. Proposals for unconfirmed schemes without this safeguard would not attract funding at PR19.
4. Adjustments to our cost baselines

4.1 Our draft methodology proposals

The ‘special cost factor’ process was an important component of our cost assessment framework at PR14. The mechanism allowed companies to make a claim for a cost adjustment where our models and baselines had not adequately captured expected costs. Such costs are typically company specific. Examples include:

- company specific statutory requirements;
- an atypically large investment by the company; or
- regional operating circumstances that result in higher costs.

Our draft methodology proposals said that we intended to retain an adjustment process for PR19, but that we would set a high evidential bar for allowing adjustments. We discuss the evidence we expect companies to provide to justify cost adjustments in this section.

4.1.1 Making the process more symmetrical

By its very nature, the adjustment process should be symmetrical. Our cost models are just as likely to overstate a company’s efficient cost allowance as they are to understate it. In both cases, an adjustment may be appropriate.

At PR14, the adjustment process was generally one-sided. Companies would make claims for cost adjustments. Where we accepted these claims, they resulted in upward adjustments to the companies’ cost baselines. There was no process to identify instances where downward adjustments might be required.

If the process is one-sided, customers may not be adequately protected in cases where the models overestimate companies’ expenditure requirements.

In our draft methodology proposals, we set out our intention to make the process more symmetrical at PR19. We said we would scrutinise business plans to identify appropriate downward adjustments to our cost baselines. We said we would particularly scrutinise business plans that include a large number of cost adjustment claims.
We also proposed that for every adjustment we make as a result of a company’s claim, we will consider whether an offsetting adjustment would be appropriate. We said that such offsetting adjustments may be appropriate for claims against ‘persistent’ costs, rather than for claims against one-off exceptional expenditure. Where the costs are persistent and have been incurred in the past, our modelled cost baselines, which are based on historical data, are likely to be affected by them and be higher, even for companies for which such costs are irrelevant.

4.2 Responses to our proposals

Respondents agreed with our intention to retain the cost adjustment process.

In relation to the symmetry of the process, respondents generally agreed that the process should be symmetrical. Respondents also agreed with the argument that some cost claims could be offset with negative adjustments, although there were challenges around how downward adjustments would be implemented. Companies argued that they should be able to challenge potential downward adjustments if they are affected by them. Some suggested that companies’ early submissions of cost claims to us, in May 2018, could be shared with other companies so they can provide evidence to rebut claims that could affect them.

Most water companies said that our indicative cost assessment models should be revealed to them before they submit cost adjustment claims, so that claims can be better informed and not raised unnecessarily. Some companies said that if companies do not see the models in advance, then the quality of cost claims should not influence their categorisation as part of our initial assessment of business plans.

One company argued that the materiality threshold in retail should be the same as in wholesale, because retail is treated as a standalone business.

4.3 Our final position on adjustments to our cost baselines

4.3.1 Symmetrical adjustments

As we set out in chapter 9 (securing cost efficiency) of our final methodology, we will implement a more symmetrical adjustment process.

We will consider where our models may be overstating a company’s efficient allowance and will adjust our cost baseline where appropriate. For example, we will
consider companies’ unique circumstances, such as regional factors, and whether our models overcompensate for them.

Water companies often justify a cost claim using evidence that a cost driver affects them significantly more than other companies, and that this impact is not properly addressed by our benchmarking models. We expect companies to consider offsetting beneficial circumstances that could reduce the need to raise cost claims. We will also take steps to identify such circumstances to make sure the process is not one-sided.

We will have a process of symmetrical adjustments that apply to ‘persistent’ cost adjustment claims – that is, claims against persistent rather than one-off costs, such as regional factors. Such costs are likely to be included in our benchmarking analysis, in which case they will be reflected in all companies’ cost baselines. Where we accept such claims, we will consider appropriate adjustments to other companies whose baselines should not reflect these costs. We will determine the appropriate adjustment on a case by case basis. We will take into consideration a company’s position, relative to a relevant metric (cost driver), and its total cost. Where appropriate, we could inform our view by comparing our modelling result with the claim’s historical costs included to the result with the claim’s historical costs excluded.

We do not intend to share cost adjustment claims submitted to us in May 2018. We do not consider it appropriate to do so. Companies will only submit the final and assured version of their cost adjustment claims with their business plans. The purpose of the early submission of special cost claims is to assist our review process, helping us to reach decisions on cost claims by the end of the initial assessment stage and so to provide exceptional and fast track companies with early certainty (based on our draft determinations) about our decisions on cost adjustment claims.

Companies will have an opportunity to make representations in response to our draft determinations. As part of these representations, companies will be able to respond to any negative cost adjustment that we may have implemented to their baselines.

Box 2 presents the types of evidence we expect companies to submit in support of their cost adjustment claims.
Box 2 Evidence to support cost adjustment claims

Need for cost adjustment

- Is there persuasive evidence that the cost claim is not included (or, if the models are not known, would be unlikely to be included) in our modelled baseline?
- Is it clear the allowances would, in the round, be insufficient to accommodate special factors without a claim?

Management control

- Is the cost driven by factors beyond management control?
- Is there persuasive evidence that the company has taken all reasonable steps to control the cost?

Need for investment

- What incremental improvement would the proposal deliver?
- Is there persuasive evidence that an investment is required?
- Where appropriate, is there evidence – assured by the customer challenge group (CCG) – that customers support the project?

Best option for customers

- Does the proposal deliver outcomes that reflect customers’ priorities, identified through customer engagement? Is there CCG assurance that the company has engaged with customers on the project and this engagement been taken account of?
- Did the company consider an appropriate range of options with a robust cost–benefit analysis before concluding that the proposed option should be pursued?
- Is there persuasive evidence that the proposed solution represents the best value for customers in the long term, including evidence from customer engagement?
- Has risk been assessed? Have flexible, lower risk solutions been assessed?
- Has the impact on natural capital and the environment been considered?

Robustness and efficiency of costs

- Is there persuasive evidence that the cost estimates are robust and efficient?
• Is there high quality third party assurance for the robustness of the cost estimates?

**Customer protection**

• Are customers protected if the investment is cancelled, delayed or reduced in scope?
• Are the customer benefits that relate to the claim linked to outcomes and to a suitable incentive in the company’s business plan?

**Affordability**

• Has the impact on affordability been considered?
• For large investment schemes in particular, is there persuasive evidence that the investment does not raise bills higher than what is affordable?

**Board assurance**

• Does the company’s Board provide assurance that investment proposals are robust and deliverable, that a proper appraisal of options has taken place and that the option proposed is the best one for customers?

Not every claim will require all the evidence listed in box 2. Different types of claims may require different evidence to support them. It will be for companies to provide the appropriate evidence to support their claims. For example, a company may decide it does not need a cost–benefit analysis to support a cost claim arising from regional operating circumstances, such as exceptional congestion in the region or a local tax.

We will set a high evidential bar for accepting a cost adjustment claim. Companies should follow a robust decision making process, with proper options assessment, and present robust evidence of cost efficiency. Without these we will not be persuaded to make an adjustment.

We expect companies to improve the quality of their cost–benefit analyses relative to what they submitted at PR14. The analysis should follow best practice, with proper options assessment and a clear explanation of the assumptions used. The relevant options for consideration will depend on the specific investment.

We expect companies considering investment to address supply–demand imbalances to consider the option of water trading. If such an option is not costed in
the cost–benefit analysis, the company should explain why it is not. Supply–demand claims should be fully consistent with a company’s water resources management plan (WRMP). Likewise, for large investments that qualify for direct procurement, a company should evaluate such an option in its cost–benefit analysis or justify why it has not. Market testing and evidence may play a role in the network plus and bioresources controls too, such as the use of the bioresources market to expand capacity or ecoservices market platforms to procure environmental improvements.

Where appropriate, we expect companies to extend their cost–benefit analyses to evaluate the ‘real options’ value of less risky solutions. This is particularly relevant for projects with a large unrecoverable initial investment (that is, sunk cost) and those where the need for the investment is uncertain (for example, because they are dependent on a possible future scenario). In such cases, we expect companies to consider the value, for customers, of the risk reduction that comes from options that maintain the flexibility to change course, defer, abandon or expand the programme of work.

For resilience claims, we expect companies to provide evidence that they have considered different intervention options and that a claim provides resilience under realistic stress scenarios.

For projects under the direct procurement for customers (DPC) approach, the competitive procurement process should provide evidence on cost efficiency. A very early DPC process, where the company tenders a problem rather than a solution, should also provide robust evidence that the proposed solution is the best option for customers.

Our assessment of DPC schemes will complement the evidence from the competitive DPC process. We will assess:

- the need for the investment;
- whether customers are suitably protected if the project is cancelled, delayed or reduced in scope; and
- the affordability of the investment.

We will also consider whether our cost baselines cover some of the DPC investment, and will adjust our baselines accordingly.
5. Our approach to retail controls

Our cost assessment approach to business retail is discussed in chapter 9 (securing cost efficiency). Below we provide further detail on our approach to residential retail and to dealing with input price pressure in retail controls.

5.1 Our draft methodology proposals

5.1.1 Setting efficient allowances for residential retail

PR14 was the first time that we set a separate price control for retail services, so we took a cautious approach to setting baselines for residential retail. Our aim was to deliver savings for customers while setting achievable cost reduction targets for companies. In our PR14 final determination, we said we expected our approach for residential retail to evolve so that in future price controls, our cost baselines would be based on efficient companies rather than on the industry average.

For residential retail, which is about 9% of companies’ total expenditure, we assessed costs using the average cost to serve (ACTS) approach. Our cost allowance for companies was equal to the ACTS, unless the company’s projection was lower (that is, more efficient) than the ACTS, in which case we allowed the company to use projected costs instead. Inefficient companies were allowed a gradual catch-up (or glide path) to the efficient frontier.

The retail control was not automatically indexed to an economy-wide measure of inflation. We considered evidence on input price pressure submitted by companies. In a small number of cases, where the evidence was robust and the company’s cost projection was relatively efficient, we made an allowance for input price pressure.

In our draft methodology, we proposed moving away from the ACTS approach of PR14 and instead assessing relative efficiency using econometric benchmarking.

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1 Ofwat, ‘Final price control determination notice: policy chapter A5 – household retail costs and revenues’, December 2014
2 Our ACTS approach consisted of unit-cost benchmarking (average retail cost per customer in the year 2013-14) supplemented with industry-wide and company specific off-model adjustments. See the appendix 11 (securing cost efficiency) for more details about our PR14 approach.
analysis. We indicated that we intended to focus our modelling on three levels of costs:

- total residential retail costs;
- bad debt plus debt management costs; and
- total residential retail costs less bad debt and debt management costs.

We proposed setting efficient, rather than average, cost baselines for companies. Our efficient cost baselines will be informed by historical and forward looking performance in the sector, as well as by relevant information from outside the sector. We do not intend to allow a gradual catch-up (or glide path) to the efficient frontier. We proposed that our baselines would apply to all companies, whether they are less or more efficient than our baseline. If they are more efficient, they may get an allowance which is higher than what they have put in their business plan.

**Figure 2  Setting efficient cost baselines for residential retail**

5.1.2 Legacy depreciation

At PR14, we decided not to have regulatory capital value (RCV) in the retail controls. Retail assets that were invested before 1 April 2015 (‘legacy assets’) were remunerated through the RCV in the wholesale price controls.
Companies report depreciation on legacy assets and new assets (assets that were invested after 1 April 2015) separately to us. For the purposes of retail cost benchmarking at PR19, we said that we would include total depreciation in our analysis. This avoids distortions in our benchmark analysis associated with the timing of different investment decisions across companies. As at PR14, we said we would then remove depreciation related to legacy assets from our efficient cost baselines, to make sure customers do not pay twice for the same legacy depreciation.

### 5.1.3 Dealing with input price pressure

We proposed not indexing the retail (residential and business) controls to a measure of general inflation. Our preference was to deal with input price pressure as part of our totex allowance, rather than using indexation. Companies would have to present evidence to support any claim for an allowance for input price pressure.

### 5.2 Responses to our proposals

#### 5.2.1 Setting efficient allowances for residential retail

The majority of respondents supported our proposal to move away from the PR14 ACTS approach. There was support for a range of econometric benchmark models, including a separate model to assess the efficiency of bad debt costs (including debt management).

Three respondents raised the concern that it may be difficult to establish stable models to assess some areas of retail. For example, it may be challenging to benchmark levels of bad debt, because of differences in debt provisioning policies across water companies.

Some respondents challenged our proposal to set the efficient baseline for retail at frontier company performance. They suggested it may be more appropriate to set an efficiency challenge at the upper quartile level of performance, given that no benchmark model is perfect.

One respondent disagreed with our proposal not to allow a glide path towards efficient benchmarks. It noted that this would be a tough challenge when combined with other parts of the retail control (such as thin retail margins and no indexation), which will further challenge companies at PR19. The Consumer Council for Water
(CCWater) supported our proposal not to allow a glide path, highlighting the fact that inefficient retailers will have had five years to catch up by the time we set our baselines at PR19.

There were mixed views on our proposed approach not to account for variations in regional labour costs in our retail benchmark models. Some respondents argued that although some retail functions (such as call centres) can be located anywhere, other retail support staff are regionally located. One respondent suggested that customers value local billing and contact centres. Other respondents supported our proposal, and raised concerns that inefficient companies could be rewarded if they choose to locate retail functions in areas with higher than average wages costs, for those retail services that are not geographically restricted.

We also received mixed views on the use of evidence on retail efficiency from other sectors. A few respondents disagreed with our proposal to compare levels of bad debt in the water sector with levels in other sectors. They argued that retailers in other sectors have very different operating environments, which limits cross-sector comparisons. But we received cautious agreement from a larger number of respondents, on the proviso that comparisons are relevant and the weight placed on cross-sector evidence is proportionate.

### 5.2.2 Dealing with input price pressure

A number of respondents disagreed with our proposal not to automatically index the retail controls, with one respondent in strong disagreement. Respondents argued that this decision, combined with stretching proposals for other parts of the retail controls, provides an unrealistic challenge for retailers – and this would be particularly stretching for those retailers already performing at the frontier of efficiency.

A number of respondents highlighted that wider economic circumstances are likely to be different at PR19 compared to PR14, particularly in the context of Brexit. This could mean there will be more uncertainty, and potentially high levels of inflation, at the time of setting the PR19 price control.

CCWater agreed with our approach, suggesting that there is no evidence that retail costs are affected by inflation to the same degree as wholesale costs. Eight respondents agreed that no indexation was appropriate, provided there is a mechanism in place to deal with input price pressure. A few respondents suggested it would be preferable to set a central adjustment for all companies to take relevant
input price pressures into account, because retailers typically face the same input costs.

5.3 Our final position

5.3.1 Setting efficient allowances for residential retail

To strengthen the incentives for companies to submit stretching retail cost projections at PR19, we have decided to adopt the assessment approach in our draft methodology proposals.

We intend to use econometric benchmarking to establish efficient baselines for residential retail. We have kept up our engagement with the sector since publishing our draft methodology proposals in July, to further develop our thinking on the drivers of residential retail costs and the feasibility of developing econometric models. We consider that the scope of operations and costs are similar across water retailers. Plus, at PR19 we will have five years of data to develop robust benchmarking for residential retail. This supports the development of an econometric approach and will result in fewer company specific adjustments to our benchmark models.

Econometric models have a number of advantages over a unit cost approach. An econometric approach means the model can simultaneously account for multiple factors that drive differences in costs across companies. Our models will account for the impact of dual bill versus single bill customers and differences in the cost to serve a metered customer versus an unmetered customer. We will consider bill sizes and deprivation levels in areas served by water companies when assessing bad debt levels.

If we consider that our retail econometric models are not sufficiently robust, we will use an efficient cost to serve (ECTS) approach to assess residential retail costs. This approach is similar to our ACTS approach at PR14, with a higher efficiency challenge. In box 3, we explain the ACTS approach and highlight how we will develop this approach if we decide to adopt an ECTS approach for PR19.

We do not intend to account for variation in regional labour costs in our benchmarking analysis. We consider that the impact of regional labour costs can be substantially mitigated in most retail activities, as most retail activities are not bound by location.
We still consider it appropriate to consider cross-sector evidence when setting efficient baselines for water retailers. We commissioned a report from PricewaterhouseCoopers (PwC) in September 2017\(^3\) to benchmark the water sector’s bad debt and customer service costs against other sectors. The analysis shows that water companies can be usefully compared with retailers in other sectors and that the performance gap between the water sector and other sectors cannot be explained entirely by the different frameworks in which they operate.

The report suggests that some water companies perform far better on bad debt recovery than their industry peers – but that even efficiently performing water companies are lagging behind performance in other sectors.

The report highlights a lack of publicly available data on water sector-specific customer service measures. Most observations are based on overall utilities performance (that is, water and other utilities combined). To support cross-sector comparisons, we have included a set of targeted customer service metrics in our PR19 data request. This information will help us compare cost efficiency in water retailer customer service functions against retailers in other sectors. We will use this information to further assess whether our baselines for retail are reasonable, given performance in other sectors.

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**Box 3 Summary of the PR14 cost assessment approach for residential retail and how (if necessary) it would be developed for PR19**

We calculated the companies’ costs to serve for all customers as retail costs to serve per ‘unique customer’.

- Retail costs included operating expenditure (opex) plus depreciation, but excluded metering costs and any other cost adjustments.
- ‘Unique customers’ was the sum of households billed for water only, households billed for wastewater only and households billed for water and wastewater, all multiplied by an ‘economies of scope’ factor\(^4\) of 1.3.

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\(^3\) PwC, ‘Retail services efficiency benchmarking: report for Ofwat’, September 2017

\(^4\) An economies of scope adjustment was made to account for the additional average cost of servicing a dual service (water and wastewater) customer over a single service customer.
Our efficiency benchmark was based on the ACTS, which was the industry average\(^5\) cost to serve.

- If we use an ECTS approach at PR19, we propose setting the benchmark based on the most efficient companies, rather than on average efficiency.

Companies were allowed to take their cost forecast or the ACTS benchmark, whichever was lower.

- If we use an ECTS approach at PR19, we propose using our benchmark to set efficient costs for all companies, whether they are above or below our benchmark.

We made an extra allowance for the extra cost to serve metered customers. The allowance was company specific, based on each company’s expected level of metering.

We made other company specific adjustments where retailers provided robust evidence that material factors beyond management control affected them in a different way to other companies. Where we made adjustments for cost included in the ACTS, this reduced the industry ACTS.

We allowed companies whose costs were above the benchmark a three-year glide path.

- For PR19, we do not propose allowing companies a glide path.

### 5.4 Our final position on input price pressure for retail

We will not index the retail controls to a general measure of inflation. We consider that this approach is most appropriate for the retail controls, and provides appropriate incentives for companies to manage input costs. This is consistent with the incentives for businesses in more competitive markets.

\(^5\) We used an unweighted average. Each company’s cost to serve had the same impact on the average, regardless of the number of customers each company served.
We consider that inflation risk in our retail controls is low relative to inflation risk in wholesale controls. In retail, a relatively large proportion of retail costs is attributed to labour costs, and companies should be incentivised to manage the risk of labour cost pressure in the short term. Moreover, the fact that there is no RCV in the retail controls means that indexation is only relevant to the allowed retail revenue. Indexation is not needed to protect the long-term value of the RCV against long-term inflation risk.

We will review evidence on forecast input price pressure in retail for the duration of the price control. If appropriate, we will make a cost allowance for inflation as part of totex. This approach ensures companies stay incentivised to manage the risk of input price pressure.

We will consider evidence on input price pressure submitted by companies⁶. We will also consider independent data sources and forecasts, such as data from the Office for National Statistics on wage growth rates.

Given that our PR19 approach involves setting an efficient cost allowance for all companies, we intend to apply a common method for determining an inflation allowance for all companies, if we consider that such an allowance is appropriate.

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⁶ Companies will separately identify input price pressure assumptions included in their retail forecasts. More information can be found in the guidance on business plan data table submissions, appointee tables 24 and 24a.
6. A transition expenditure programme for 2019-20

6.1 Our draft methodology proposals

A transition programme would allow companies to bring forward planned investment from 2020-25 to 2019-20, where it is efficient to do so. Although the expenditure would be incurred in 2019-20, for the purposes of cost performance incentives and customer charges, it would be considered as expenditure incurred in the following regulatory period (2020-25).

The purpose of a transition programme is to make more efficient use of resources and minimise whole life costs where it is efficient to bring forward an investment. In some cases such a programme may even be necessary to allow companies to meet statutory deadlines early in the next regulatory period. We are also aware that there is still some cyclicality of investment over the five years covered by a price control, with low investment in the first year of the period. A transition programme can help smooth investment in the sector and address this inefficiency.

In our draft methodology proposals, we proposed allowing a transition programme in the water network plus and wastewater network plus price controls, but not for water resources and bioresources investments (except for efficient investment relating to the Isles of Scilly). This was because there are unlikely to be early delivery dates driven by environmental requirements for water resources and bioresources investment. There was also the consideration that not having a transition programme would avoid any additional complexity caused by the different treatment of pre-2020 RCV and post-2020 investment.

6.2 Responses to our proposals

Seventeen stakeholders expressed views in responses to our question about the transition programme. These included water companies, environmental bodies and customer groups.

Overall, respondents were in favour of retaining a transition mechanism at PR19 because of the flexibility it will provide, by enabling companies to start early where appropriate and deliver their services and environmental obligations efficiently.

Some respondents agreed that there are not likely to be any investments in bioresources and water resources that require a transition mechanism. However, a few argued that the transition programme should be allowed in water resources. One
respondent argued that there are likely to be early delivery dates driven by environmental requirements for water resources. Another argued that the transition programme would be appropriate for the delivery of large scale projects required to satisfy the WRMP.

6.3 Our final position on transition programmes

In PR19, we will allow a transition programme in the network plus controls. We will also allow the transition programme in the water resources controls, but in exceptional circumstances only. We will not allow any transition expenditure in the bioresources controls (except for any efficient investment that South West Water incurs for schemes for the Isles of Scilly if it becomes the water and sewerage undertaker for all or part of the Isles) or in the retail controls.

We consider that the transition programme in water resources could be appropriate, in certain circumstances, for large investment schemes with long lead-in and delivery periods.

Further, in water resources, some investigations have an early completion date of September 2021 or March 2022, and two respondents argued that an early start is needed to inform planning for PR24.

We are not convinced that the transition programme is required to achieve these early delivery dates for investigations. In most cases, companies would be able to achieve these completion dates with a prompt start in April 2020. While we acknowledge that companies will need to have the necessary resources and work programmes in place beforehand, the costs involved in these activities are not high enough to justify a transition programme. We also consider that in the case of investigations that cannot be completed by March 2022, there is likely to be enough time before the submission of business plans for 2025-30 that a delay of a few months should not jeopardise planning for PR24.

In bioresources, we are not aware of any new environmental requirements with statutory deadlines early in 2020-25, which would necessitate companies starting investment before 2020. Our decision not to allow transition expenditure in bioresources will also avoid the complexity that would otherwise be caused by treating pre-2020 RCV and post-2020 investment differently.
7. Other cost items

7.1 Our draft methodology proposals

7.1.1 Pension deficit costs

Historically, all companies have operated defined benefit pension schemes for their employees. Recently, estimates of scheme liabilities have exceeded estimates of assets, giving rise to deficits. The deficits are repaired by additional contributions or deficit repair costs. These costs are separate from ongoing pension contributions, which we deal with in the same way as operating and capital costs.

In 2009, we set a pension deficit recovery period for each company. For some companies, the recovery period extends to 2020-25. Our information notice ‘IN 13/17: Treatment of companies’ pension deficit repair costs at the 2014 price review’ (October 2013) shows the assumed recovery periods and sets out our policy for the treatment of pension deficit repair costs at PR14 and beyond.

We will make allowances for companies to recover remaining deficits in line with the recovery period assumed in 2009. Companies will be allowed to recover 50% of these allowances from customers, in line with our policy set out in IN 13/17. However, companies will not be allowed to recover remaining deficits from customers after this time. It will be wholly up to companies’ management and shareholders to deal with any remaining deficit. This will provide a strong incentive for management to find ways to deal with remaining pension deficit costs efficiently, consistent with the incentives in more competitive markets.

7.1.2 Business rates

Business rates are rates charged on non-domestic properties, such as offices and factories. Cumulo rates are rates on land and buildings where operating assets are held (a wastewater treatment works, for example). We use the term ‘business rates’ to refer to both business rates and cumulo rates.

In our draft methodology proposals, we proposed including an allowance for business rates as part of each price control’s totex allowance. This is consistent with previous price controls.
7.2 Responses to our proposals

We received no comments on the approach to pension deficit costs we outlined in our draft methodology proposals. Our approach to these costs has been well trailed with the water sector in previous controls.

One respondent suggested we should consider a reconciliation, or true-up, mechanism for a broad range of uncertain costs, including business rates.

A7.3 Our final position on business rates

At PR19, we will include an allowance for business rates as part of each price control’s totex allowance. This will incentivise companies to manage their business rates efficiently and engage effectively with the Valuation Office Agency. A true-up mechanism would not provide such an incentive, so we do not consider it to be appropriate.

We expect companies to provide robust explanations of their forecast levels of business rates and the steps they have taken to make sure these are efficient.

At PR14, business rates were a notified item, in light of the major revaluation that was due to take place in 2017. Our current view remains that business rates will not be a notified item for PR19. We believe this creates incentives for companies to act efficiently.