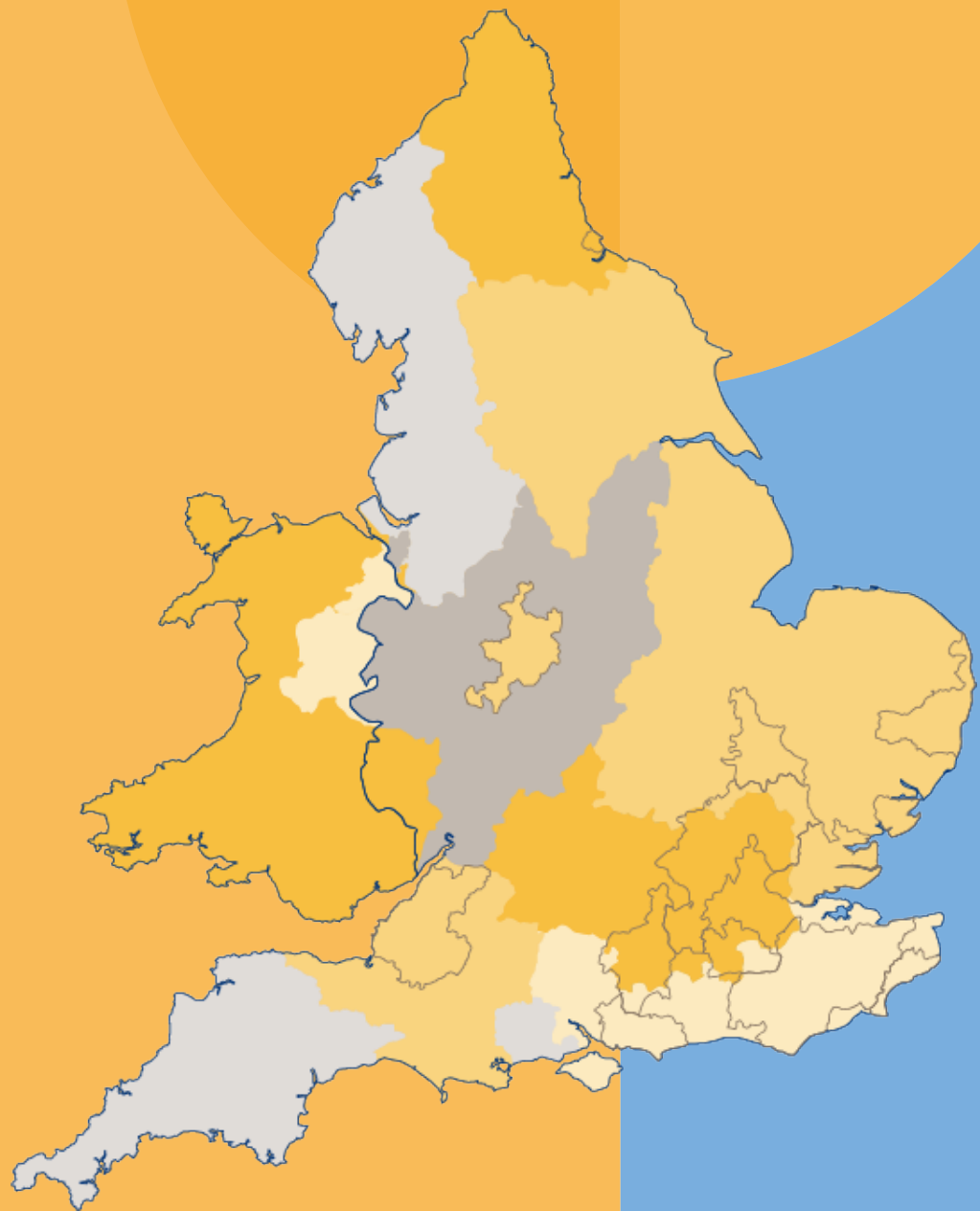


July 2019

Trust in water

PR19 draft determinations

Bristol Water draft determination



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PR19 draft determinations: Bristol Water draft determination

About this document

This document, together with the 'Notification of the draft determination of price controls for Bristol Water', sets out for consultation the details of the draft determination of price controls, service and incentive package for Bristol Water for 2020 to 2025. All figures in this document are in 2017-18 prices except where otherwise stated.

The draft determination sets out:

- the outcomes for Bristol Water to deliver;
- the allowed revenue that Bristol Water can recover from its customers; and
- how we have determined allowed revenues based on our calculation of efficient costs and the allowed return on capital.

The draft determination covers three price controls for the 2019 price review (PR19):

- water resources;
- water network plus; and
- residential retail.

This draft determination is in accordance with our [PR19 methodology](#), our statutory duties and the UK Government's statement of strategic priorities and objectives for Ofwat. We have also had regard to the principles of best regulatory practice, including the principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted.

All of the responses to the initial assessment of business plans, including all of the companies' revised business plans, provided by 1 April 2019 are taken into account in our decisions where relevant. Where appropriate, we explicitly set out our response to points and issues raised by respondents.

Our decisions also take into account the representations made on the fast track draft determinations where points and issues raised are relevant to the slow track and significant scrutiny draft determinations. We will deal with the other elements of the representations on the fast track draft determinations as part of the final determinations.

We have not necessarily been able to take full account of all late evidence, submitted after 1 April 2019 business plans, and we will consider this information for the final determination.

The appendices to this document provide more detail and form part of the draft price control determination:

- PR19 draft determinations: Bristol Water - Cost efficiency draft determination appendix

- PR19 draft determinations: Bristol Water - Outcomes performance commitment appendix
- PR19 draft determinations: Bristol Water - Accounting for past delivery appendix
- PR19 draft determinations: Bristol Water - Allowed revenue appendix

For all other documents related to the Bristol Water draft determination, please see the [draft determinations webpage](#).

How to respond

Written representations on the draft determinations should be provided to us by 10am on 30 August 2019. Representations can be made by all stakeholders. Representations can be sent either to our PR19 inbox (PR19@Ofwat.gov.uk) or by post to our Birmingham office address: Ofwat, Centre City Tower, 7 Hill Street, Birmingham, B5 4UA.

To ensure transparency, we expect companies to publish their representations in full. We also intend to publish all the written representations we receive on our website once our final determinations are made.

In view of this, if respondents consider that some of the information in their representations should not be disclosed (for example, because they consider it is commercially sensitive information) they should identify that information and explain why. We would expect strong, robust reasons that are specific to the information concerned. We will take such explanations into account, but we cannot give an assurance that information included in representations will not be disclosed.

Where companies are making representations, they should consider what further evidence may be necessary to submit with their representations as a result of this draft determination. Where companies consider that we have not appropriately considered any points previously raised by the company, companies should include this within their representations. Companies should provide a completed 'All company representation pro forma' alongside any representations.

We will publish Bristol Water's final determination on 11 December 2019 after considering representations (from all stakeholders) on the draft determination and other relevant matters. If Bristol Water accepts the final determination, it will be accepting that it has adequate funding to properly carry out the regulated business, including meeting its statutory and regulatory obligations, and to deliver the outcomes within its final determination.

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1 Summary

Through PR19 we are enabling, incentivising and challenging water companies to address the key issues facing the sector of climate change, a growing population and ever increasing customer expectations about service. We expect companies to look well beyond the five year price review period to meet needs of future customers and protect and improve the natural environment.

Our PR19 methodology set out a framework for companies to address these challenges, with particular focus on improved service, affordability, increased resilience and greater innovation. Our draft determinations are based on our detailed review of the revised plans submitted to us on 1 April. We are intervening, where required, to protect customers.

1.1 What the draft determination will deliver

Our draft determination for Bristol Water will cut average bills by 15.5% in real terms in the 2020-25 period compared to the company's proposed 6.0% reduction. Table 1.1 below sets out the difference in bill profile between the company's business plan submission in April 2019 and our draft determination. Average bills are lower than proposed by Bristol Water, reflecting our view of efficient costs. Further details are set out in section 6.

Table 1.1: Bill profile for 2020-25 before inflation

	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Company plan (April resubmission)	£183	£175	£174	£174	£173	£172
Draft determination	£183	£155	£155	£155	£155	£155

Our draft determination allows Bristol Water £22 million to invest in improvements to service, resilience and the environment. Key parts of this allowance are:

- £9 million to install more than 48,000 more meters;
- £5.7 million investing in improving resilience of critical mains infrastructure;
- £4.5 million to improve the environment and meet the requirements of Water Industry National Environment Programme (WINEP);
- £2.4 million to reduce leakage to levels beyond the industry's forecast upper quartile threshold; and
- £1.4 million to address the impact of deteriorating raw water quality.

Further details on our cost allowances are set out in section 3.

Our draft determination package includes a full set of performance commitments, specifying the minimum level of service that Bristol Water must commit to deliver for customers and the environment. Each performance commitment also has a financial or reputational incentive to hold the company to account for delivery of these commitments.

The performance commitments require Bristol Water to deliver service improvements by reducing water supply interruptions and customer contacts about drinking water quality. Bristol Water will deliver environmental benefits by reducing leakage and per capita consumption. The company will also provide more support for vulnerable customers by 2024-25. Further details of performance commitments are set out in Table 1.2 below and in section 2.

Table 1.2: Key commitments for Bristol Water

Area	Measure
Overall incentive package	Overall, the likely range of returns from the outcome delivery incentive package equates to a return on regulatory equity range of - 3.51% (P10) to + 0.97% (P90).
Key common performance commitments	<ul style="list-style-type: none"> • 15% reduction in annual level of leakage by 2025 from the 2020 level¹. • 6.3% reduction in per capita consumption by 2024-25 • 75% reduction in water supply interruptions by 2024-25
Bespoke performance commitments	<ul style="list-style-type: none"> • 54% reduction in customer contacts about drinking water quality by 2024-25 • 29% reduction in properties at risk of receiving low pressure by 2024-25 • 13% increase in local community satisfaction by 2024-25

Note: The calculations behind these numbers are outlined in the 'Bristol Water - Outcomes performance commitment appendix'

¹The company's leakage commitment is to reduce its average annual leakage level by 15% from its 2019-20 level to its 2024-25 level. The figure here and in the 'Bristol Water - Outcomes performance commitment appendix' is calculated on a three-year average basis to smooth annual variations due to weather.

1.2 Allowed revenues

Our draft determination sets allowed revenue or average revenue for each of the price controls. Table 1.3 shows the allowed revenues in the draft determination across each price control. Further details on our calculations of allowed revenues are set out in section 4.

Table 1.3: Allowed revenue, 2020-25 (£ million)

	Water Resources	Network plus - water	Wholesale Total	Residential retail
Final allowed revenues (£ million)	84.4	392.8	477.2	50.3

Note: retail revenue is the sum of the margin, retail costs, and adjustments. The residential retail control is an average revenue control. We have included forecast revenue (in real terms) for this control to illustrate the total revenue across all controls.

As set out in the ‘Cost of capital technical appendix’, we are updating our assessment of the cost of capital for Bristol Water’s draft determinations. The updated cost of capital is 3.19% (on a CPIH basis, 2.19% on a RPI basis) at the level of the Appointee, a reduction of 0.21% from our early view set out in the PR19 methodology.

We consider that Bristol Water’s draft determination is financeable, based on an efficient company, with the notional capital structure, and is sufficient to deliver its obligations, including to ensure a long term resilient service. Each company is responsible for ensuring its capital and financial structure allows it to maintain financial resilience over the short and the long term. We expect Bristol Water to take account of this requirement and of the reasonably foreseeable range of plausible outcomes of their final determination including evidence of further downward pressure on the cost of capital in very recent market data. We expect Bristol Water to provide appropriate Board assurance that it will remain financeable on a notional and actual basis and can maintain its long term financial resilience in its response to our draft determination. Further detail on our assessment of financeability is set out in section 5.

We have encouraged companies to take greater account of customers’ interests – and to transparently demonstrate that they are doing so in the way they finance themselves, pay dividends to their shareholders, and determine performance related executive pay. Bristol Water has committed to meeting the expectations set out in our ‘[Putting the sector in balance position statement](#)’. It has confirmed it will apply our gearing outperformance mechanism and expects gearing of less than 70% during 2020-25. The company is taking steps to demonstrate how its dividend and performance related executive pay policies in 2020-25 will align with customer

interests. However, we expect the company to continue to take additional steps in these areas to meet our expectations so that customers can have more trust in the water sector. These include providing further detail about its how its dividend policy will take into account performance against commitments made to customers and demonstrating that its policy on performance related executive pay has a substantial link to stretching performance delivery for customers through 2020-25.

In the 'Putting the sector in balance' position statement, we also encouraged companies to adopt voluntary sharing mechanisms, particularly where, for example, companies outperform our cost of debt assumptions. Bristol Water has not proposed any voluntary sharing mechanisms, apart from a mechanism which would share up to 100% of any company-specific adjustment it is awarded, if it does not achieve its performance targets in customer and stakeholder satisfaction surveys.

1.3 Where we intervene

Our initial assessment of Bristol Water's plan on 31 January 2019 assessed the plan as slow track. We identified a number of areas where material interventions were required to protect customers' interests. In its 1 April 2019 revised business plan, Bristol Water has not adequately addressed our concerns. In our draft determinations, we intervene in Bristol Water's plan in the following areas^[OBJ]:

- We align total expenditure (totex) allowances to our view of efficient costs using the comparative information available to us and because the company did not provide convincing evidence to explain why its proposed costs were higher than our view of efficient costs. This intervention reduces Bristol Water totex costs by 13.6%, a substantial reduction in costs, and saves customers £70 million.
- We remove the financial incentives on the population at risk from asset failure performance commitments.
- We increase the strength of financial incentives for performance commitments such as leakage and supply interruptions.
- We increase underperformance rates in areas where the company is currently a poor performer, such as mains repairs.
- We reject three cost adjustment claims relating to treatment complexity, raw water purchase and the age of its network.
- We reject the company's proposed company specific adjustment for cost of debt allowance.

We set out further detail of our interventions in this document and in the Bristol Water actions and interventions documents.

2 Outcomes

The outcomes framework is a key component in driving companies to focus on delivering the objectives that matter to today's customers, future customers and the environment in the 2020-25 period and beyond. Outcomes define the service package that companies should deliver for their customers and their incentives to do this.

There are two key elements of the outcomes framework: performance commitments and outcome delivery incentives. Performance commitments specify the services that customers should receive and set out in detail the levels of performance that the companies commit to achieve within the five year period from April 2020 to March 2025. Outcome delivery incentives specify the financial or reputational consequences for companies of outperformance or underperformance against each of these commitments. (They are referred to as 'out' where there is a payment to the company for better than committed performance, 'under' where there is a payment to customers where there is worse than committed performance, or 'out-and-under' incentives, depending on their design). Most outcome delivery incentives will be settled at the end of each year to bring incentives closer to the time of delivery of the service ('in-period' incentives) and some will be settled once at the end of the five year period ('end-of period' incentives). The outcomes framework gives companies the freedom to innovate and explore to find the most cost-effective way of delivering what matters to their customers.

The outcomes framework sits in the broader context of the company's statutory and licence requirements for service delivery. Independently of the outcomes framework, each company also has to ensure that it complies with its legal obligations, or risk enforcement action. If a company's performance falls below the level set for a performance commitment (irrespective of the existence of any deadband or collar), we will consider whether this is indicative of wider compliance issues to the detriment of consumers and whether enforcement action, with the potential for remedial and fining measures, is warranted.

Please see the 'Delivering outcomes for customers policy appendix' for further details on our policy decisions on cross-cutting issues such as common performance commitments and outcome delivery incentive rates.

2.1 Customer engagement

In our PR19 methodology we set out our expectations that companies should demonstrate ambition and innovation in their approach to engaging customers as they develop their business plans. This includes direct engagement with customers to develop a package of performance commitments and outcome delivery incentives.

We expect customer challenge groups to provide independent challenge to companies and independent assurance to us on: the quality of a company's customer engagement and the degree to which this is reflected in its business plan.

We continue our assessment of customer engagement evidence following each company's submission of its response to our initial assessment of its plan in April 2019. We find variability in both the quality of engagement undertaken by companies and the extent to which customers' views are reflected in company proposals.

Bristol Water's business plan provided evidence of elements of high quality customer engagement although we highlighted some areas of concern in our initial assessment of the company's plan, such as the approaches to triangulation and customer segmentation.

In response to our initial assessment of its plan Bristol Water has undertaken new customer engagement specifically in support of its revised plan. This research seeks customer views on the acceptability of the overall plan, the package of incentives, bill profiles and small company costs. This online-only research is of a satisfactory quality, with the customer challenge group providing positive assurance, but we note that the results do not support all of the company's proposals, for example, on deadbands.

The company also ran focus groups to assess customer support for the outcome delivery incentive package. The customer challenge group outlines that the results of the focus groups 'should not be considered in isolation [but] they can be used in conjunction with the associated research undertaken in summer 2018'.

The customer challenge group concludes that 'the additional customer research carried out by Bristol Water is appropriate and robust and that it meets the Panel's tests of best practice. The results of the engagement have been used appropriately, in conjunction with previous engagement outcomes in some cases, to reshape the PR19 business plan where necessary'.

2.2 Performance commitments and outcome delivery incentives

Bristol Water's performance commitments and outcome delivery incentives for the 2020-25 period are listed in Table 2.2 and Table 2.3. The detail of these performance commitments and outcome delivery incentives are set out in the 'Bristol Water - Outcomes performance commitment appendix'. The performance commitments and outcome delivery incentives include the revisions accepted by the company in response to our 31 January 2019 initial assessment of business plans and any additional interventions we are making in the draft determination.

The material interventions we are making in the draft determination are set out in Table 2.1 below. 'Bristol Water – Delivering outcomes for customers actions and interventions' sets out in detail our interventions in the company's performance

commitments and outcome delivery incentives following our 31 January 2019 initial assessment of plans.

Table 2.1: Summary of key interventions on outcomes

Intervention description
<p>Accepting the company's proposed 15% reduction in leakage by 2024-25, which will make its performance better than the industry upper quartile.</p> <p>Increasing underperformance and outperformance rates in relation to leakage to reflect our concerns with the company's approach to setting its rates.</p>
<p>Increasing the reduction in per capita consumption to 6.3% which is the upper quartile reduction. The company has some supply demand balance issues in the region, and trades water with its neighbour.</p> <p>Increasing underperformance and outperformance rates in relation to per capita consumption to reflect our concerns with the company's approach to setting its rates.</p>
<p>Accepting the company's proposal of improving water supply interruptions performance by 75% to forecast industry upper quartile by 2024-25, as the company is currently the worst performer in the industry. We are setting an industry wide glide path for all years before 2024-25.</p> <p>Increasing underperformance and outperformance rates in relation to water supply interruptions to reflect our concerns with the company's approach to setting its rates.</p>
<p>Increasing the underperformance rate in relation to main repairs to the upper bound of our reasonable range so that it sufficiently incentivises the company to deliver the significant improvement it has forecast.</p>
<p>Removing the financial incentives for the reduction of the population at risk from asset failure (up to £2m outperformance and £6m underperformance over 2020-25) that have been proposed by the company, due to our lack of confidence in the company's benefit calculations and because we have rejected the linked cost claim.</p>
<p>Increasing underperformance and outperformance rates in relation to customer contacts on water quality to reflect our concerns with the company's approach where they proposed to set the outcome delivery rates below the industry average even though y proposed to commit to improvements above the industry average.</p>
<p>Increasing the underperformance rate of meter penetration to its PR14 rate, so that it provides strong incentives against delivery failure, as the company has failed to deliver its PR14 performance commitment levels.</p>
<p>Accepting the performance commitment concerning local community satisfaction which incentivises the company to improve satisfaction through working with stakeholders in different ways.</p>

Table 2.2: Summary of performance commitments: common performance commitments

Name of common performance commitment	Type of outcome delivery incentive	Price controls outcome delivery incentives will apply to
Water quality compliance (CRI) [PR19BRL_PC01]	Financial - Under; In-period	Water network plus
Water supply interruptions [PR19BRL_PC02]	Financial - Out & under; In-period	Water network plus
Leakage [PR19BRL_PC18]	Financial - Out & under; In-period	Water network plus
Per capita consumption [PR19BRL_PC19]	Financial - Out & under; In-period	Water network plus; Residential retail
Mains repairs [PR19BRL_PC03]	Financial - Under; In-period	Water network plus
Unplanned outage [PR19BRL_PC04]	Financial - Under; In-period	Water network plus
Risk of severe restrictions in a drought [PR19BRL_PC05]	Reputational	N/A
Priority services for customers in vulnerable circumstances [PR19BRL_PC27]	Reputational	N/A
C-Mex: Customer measure of experience [PR19BRL_PC12]	Financial - Out & under; In-period	Residential retail
D-Mex: Developer services measure of experience [PR19BRL_PC13]	Financial - Out & under; In-period	Water network plus

Table 2.3: Summary of performance commitments: bespoke performance commitments

Name of bespoke performance commitment	Type of outcome delivery incentive	Price controls outcome delivery incentives will apply to
Customer contacts about water quality – appearance [PR19BRL_PC06]	Financial - Out & under; In-period	Water network plus
Customer contacts about water quality – taste and smell [PR19BRL_PC07]	Financial - Out & under; In-period	Water network plus
Properties at risk of receiving low pressure [PR19BRL_PC08]	Financial - Out & under; In-period	Water network plus
Turbidity performance at treatment works [PR19BRL_PC09]	Financial - Under; In-period	Water network plus

Name of bespoke performance commitment	Type of outcome delivery incentive	Price controls outcome delivery incentives will apply to
Unplanned maintenance – non-infrastructure [PR19BRL_PC10]	Financial - Under; In-period	Water network plus
Population at Risk from Asset Failure [PR19BRL_PC11]	Reputational	N/A
Helping customers who are struggling to pay [PR19BRL_PC14]	Reputational	N/A
Value for money [PR19BRL_PC15]	Reputational	N/A
Percentage of satisfied vulnerable customers [PR19BRL_PC16]	Reputational	N/A
Void properties [PR19BRL_PC17]	Financial - Out & under; In-period	Residential retail
Meter penetration [PR19BRL_PC20]	Financial - Out & under; In-period	Water network plus
Raw Water Quality of Sources [PR19BRL_PC21]	Financial - Out & under; In-period	Water resources
Biodiversity Index [PR19BRL_PC22]	Financial - Out & under; In-period	Water resources; Water network plus
Waste disposal compliance [PR19BRL_PC23]	Financial - Under; In-period	Water network plus
Water Industry National Environment Programme Compliance [PR19BRL_PC24]	Financial - Under; In-period	Water resources
Local community satisfaction [PR19BRL_PC25]	Financial - Out & under; In-period	Water resources; Water network plus
Abstraction Incentive Mechanism (AIM) [PR19BRL_PC26]	Financial - Out & under; In-period	Water resources
Glastonbury Street Network Resilience [PR19BRL_PC28]	Financial - Under; End of period	Water network plus
WINEP Delivery [PR19BRL_NEP01]	Reputational	N/A

Figure 2.1 and Figure 2.2 below provide an indication of the financial value of each of Bristol Water’s outcome delivery incentives (taking into account the impact of our draft determination interventions) showing how much the company would have to return to customers if it underperformed to the P10 level and how much the company would gain if it over performed to the P90 level. The figures cover common and bespoke commitments respectively.

Table 2.4 below provides an indication of the financial value of the overall package at the upper and lower extreme levels of performance (expressed as a percentage point impacts on RoRE (return on regulated equity)) and the overall impact of our draft determination interventions. The estimates are based on the company’s own

view of the plausible bounds of performance. The P90 is the performance threshold at which there is only a 10% chance of outturn performance being better. The P10 is the performance threshold at which there is only a 10% chance of outturn performance being worse.

Figure 2.1: Projected P10 penalties and P90 payments for common performance commitments over 2020-25 (£ million)

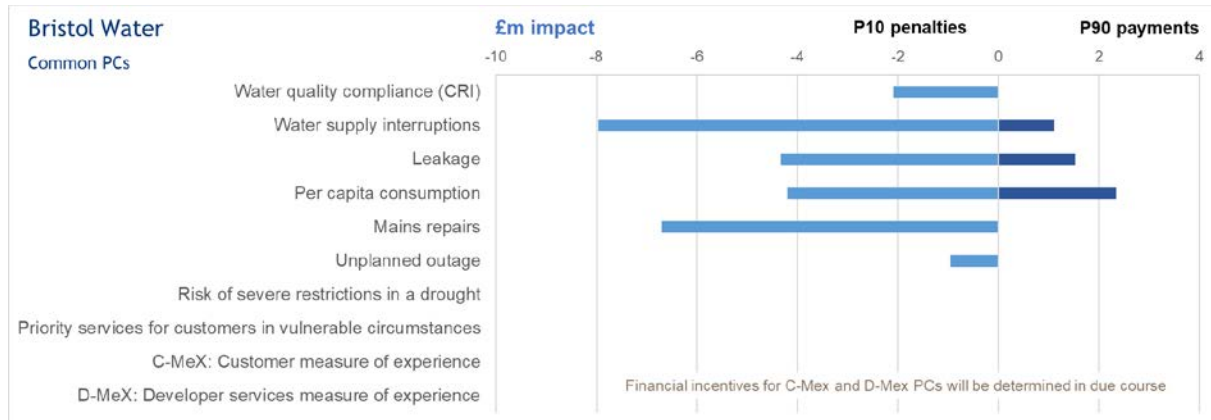


Figure 2.2: Projected P10 penalties and P90 payments for bespoke performance commitments over 2020-25 (£ million)

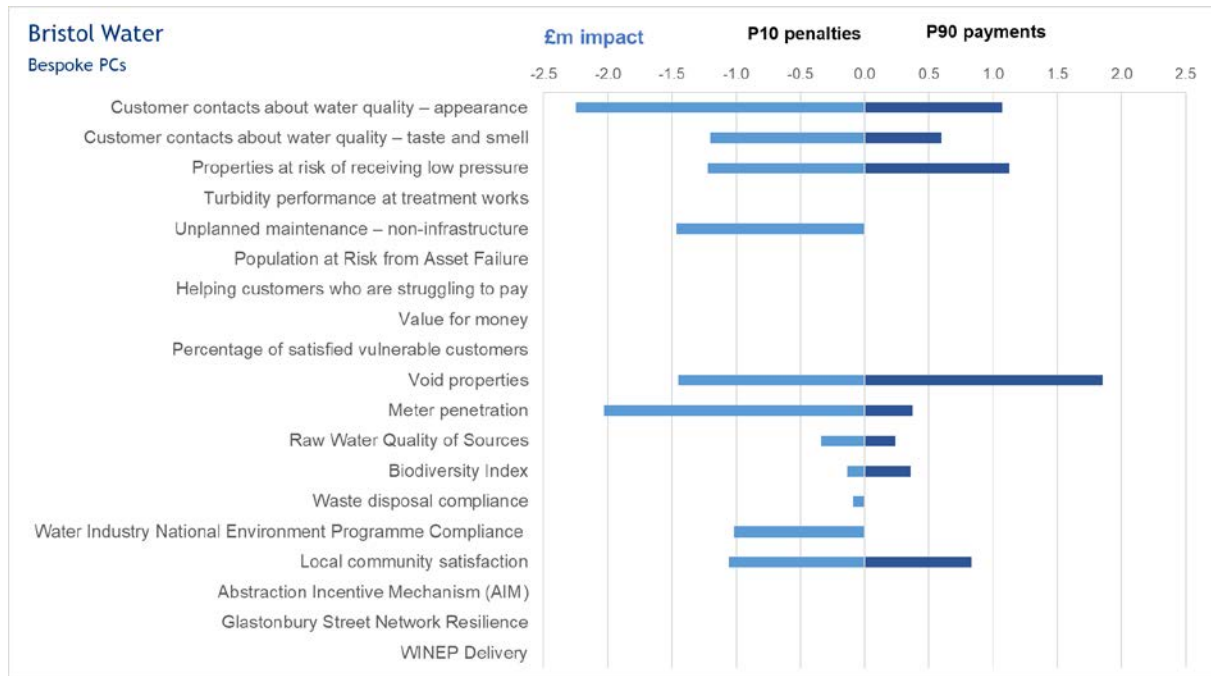


Table 2.4: Impact of draft determination interventions on RoRE range

	April 2019 business plan		Draft determination	
	% of 5 year regulatory equity		% of 5 year regulatory equity	
	P10	P90	P10	P90
Bristol Water	-2.48	+0.88	-3.51	+0.97

In the PR19 methodology we said that we expect companies to propose approaches to protect customers in case their outcome delivery incentive payments turn out to be much higher than expected. We asked companies in our initial assessment of business plans ‘PR19 initial assessment of plans: Delivering outcomes for customers policy appendix’ to put in place additional protections for customers where we considered protections were not adequate.

We are applying caps and collars to financially material and/or highly uncertain performance commitments and allowing caps and collars on other performance commitments where company proposals are supported by high quality customer engagement.

The company has accepted our standard sharing mechanism, where 50% of outperformance payments that exceed 3% of return on regulatory equity (RoRE) in any year are shared with customers through bill reductions in the following year. It also proposes to limit customer bill changes from outcome delivery incentives to £4 per year to manage bill volatility. We accept this proposal. We set out further detail of the mechanism in ‘Delivering outcomes for customers policy appendix’.

In our PR19 methodology, we decided to replace the current Service Incentive Mechanism (SIM) with two new mechanisms to incentivise companies to provide a great experience for residential customers (our customer measure of experience, or C-MeX) and developer services customers (our developer services measure of experience, or D-MeX). C-MeX and D-MeX will be operational from April 2020. We set out further details on C-MeX and D-MeX in the ‘Delivering outcomes for customers policy appendix’. We will publish our decisions on C-MeX and D-MeX incentive designs for 2020-25 as part of the final determinations in December.

We will finalise the company’s performance commitments and outcome delivery incentives in the light of representations on this draft determination, so that these can be reflected as appropriate in the company’s final determination to be published in December.

2.3 Linking outcomes to resilience

In our initial assessment of plans, we were concerned that companies' plans lacked a clear line of sight between the identified risks to resilience, the proposed mitigations to tackle these risks, and how these mitigation plans were reflected as service improvements in the form of stretching performance commitments. In this context, we are intervening to ensure Bristol Water's resilience challenges are reflected in its outcomes and performance commitments, particularly in relation to its forecast performance levels for mains repairs and to its new bespoke resilience performance commitment ('Glastonbury Street Network Resilience').

Our initial assessment of plans also noted that Bristol Water provided some evidence linking priority risks to its systems and to groups of performance commitments. However, Bristol Water provided insufficient evidence to demonstrate the benefit that specific investments have in mitigating quantified levels of risk (and/or in increasing system resilience) and supporting stable or improved commitment targets. We expect companies to address this and other issues associated with the way they integrate resilience across their business in the action plans that will be submitted by 22 August 2019 and in their responses to the draft determinations in relation to specific resilience investment proposals. We will take into account the quality of companies' response in our final determinations.

2.4 Deliverability

To maintain trust and confidence, it is important that companies not only have a high quality business plan but also that customers have confidence that the business plan will be delivered. In our initial assessment of the company's past performance Bristol Water did not provide us with sufficient evidence in its business plan of deliverability in relation to its outcomes on leakage, water supply interruptions, mains repairs and meter penetration and for its handling of customer complaints. We required the company to provide further evidence of deliverability and an action plan for continuous improvement in these areas. We have considered the additional evidence provided by Bristol Water in its 1 April 2019 submission to identify whether we need to include additional measures in its draft determinations to incentivise the delivery of its business plan, in particular whether to strengthen the outcome delivery incentives package. We summarise the conclusions of our assessment of the company's evidence here; further detail is included in 'Bristol Water - Accounting for past delivery actions and interventions', and our methodology for conducting this assessment is set out in 'Accounting for past delivery technical appendix'.

The company provides further evidence to support its deliverability, and an individual action plan for continuous improvement for each of its leakage, water supply interruptions and meter penetration performance commitments. The company does not provide further evidence to support its deliverability nor an action plan for continuous improvement for its mains repairs performance commitment.

For the leakage performance commitment, the company provides sufficient evidence in relation to some elements of the action plan for continuous improvement but there is insufficient evidence in other areas. The company provides insufficient evidence to support the deliverability of the stretch in its 2020-25 business plan for leakage. We are already intervening as part of our outcomes assessment to protect customers by increasing the underperformance payment incentive rate. For information on how we are intervening on these rates, please see the 'Delivering outcomes for customers policy appendix'. We do not consider that any further intervention is required as a result of our deliverability assessment to mitigate the risks around delivery of the 2020-25 stretch.

For the water supply interruptions performance commitment, the company provides sufficient evidence in relation to some elements of the action plan for continuous improvement but there is insufficient evidence in other areas. The company provides sufficient evidence to support the deliverability of the stretch in its 2020-25 business plan for water supply interruptions. We therefore do not consider it necessary to intervene as customers are adequately protected.

For the mains repairs performance commitment, the company does not provide additional evidence to support the deliverability of the stretch in its 2020-25 business plan or an action plan for continuous improvement. We are therefore intervening to increase the company's outcome delivery incentive underperformance payment rate to the industry average as we consider that a stronger incentive to deliver is required.

For the meter penetration performance commitment, the company provides sufficient evidence in relation to some elements of the action plan for continuous improvement but there is insufficient evidence in other areas. The company provides insufficient evidence to support the deliverability of the stretch in its 2020-25 business plan for meter penetration. We are therefore intervening to protect customers by increasing the company's outcome delivery incentive underperformance payment rate to its PR14 outcome delivery incentive rate.

For customer complaints handling performance, the company provides further evidence to support its deliverability, and an action plan for continuous improvement. While the action plan for continuous improvement is sufficient, the evidence the company provides on deliverability is insufficient. The company has demonstrated that its performance has improved since the 3 September 2018 submission, but this improvement is over a short period. We are therefore requiring the company to provide monthly actual customer complaints data for March to August 2019 to provide greater certainty of sustained improvement in performance.

If, following consideration of this evidence, we conclude there is still insufficient evidence to support deliverability, we intend to intervene in the company's final determination. This could take the form of a performance commitment on customer complaints, set in a similar way to Dŵr Cymru's performance commitment on customer complaints. For Dŵr Cymru, we have set a performance commitment which aligns to the customer complaints reported to the Consumer Council for Water

(including written, telephone and new channels such as social media complaints). The outcome delivery incentive for this performance commitment has financial outperformance and underperformance payments. We have set the performance commitment level at the forecast upper quartile based on sector performance in 2014-18.

Shortly before publication of this draft determination, Bristol Water submitted a draft policy proposal to introduce a performance commitment with a reputational outcome delivery incentive on a similar broad measure of complaints. The paper also considers the option of a performance commitment on a narrower measure covering only written complaints with an underperformance payment only outcome delivery incentive. This evidence was not considered in our assessment of deliverability for this draft determination, and we will consider it when making our final determinations.

3 Cost allowances

We set out in our PR19 methodology that we expect company business plans to show a step change in efficiency. In its business plan Bristol Water requests expenditure levels around 8% lower than it has incurred historically. This is mainly due to reduced enhancement proposals than at PR14. Despite the reduced costs in its April 2019 business plan compared to its September 2018 plan, we find the proposed costs to be significantly greater than our view of efficient costs for wholesale water. We consider the company is efficient in the residential retail price control and make an allowance slightly greater than the company requests in this area. Our main challenge to Bristol Water's business plan forecasts is on base costs. We investigated the sensitivity of Bristol Water's allowance for base costs to our modelling choices and conclude that our modelling results are robust under range of scenarios. Our results are also supported by simple unit cost analysis, which reveals that Bristol Water's business plan costs are lagging behind industry average and upper quartile.

Our approach to setting total expenditure (totex) allowances is detailed in our publication 'Securing cost efficiency technical appendix'. In addition to challenging companies to be more efficient we also, where appropriate, set safeguards to protect customers if specific investments are not delivered as planned.

In the 'Bristol Water – Cost efficiency draft determination appendix' we provide more detailed information on our cost challenge for enhancement expenditure, our allowance for cost adjustment claims and transitional expenditure and how we will deal with the uncertainty in WINEP.

3.1 Wholesale total expenditure

Table 3.1 shows the totex allowances by year and by wholesale price control for the period 2020-25. We have phased our allowed totex over 2020-25 using the company business plan totex profile.

Table 3.1: Totex¹ (excluding pension deficit recovery) by year for wholesale controls, 2020-25 (£ million, 2017-18 CPIH deflated prices)

	2020-21	2021-22	2022-23	2023-24	2024-25	Total	Company view - total
Water Resources	13.7	13.5	16.4	13.4	13.4	70.4	79.3
Water network plus	66.9	65.2	62.7	65.3	65.7	325.8	386.3
Total	80.6	78.7	79.1	78.7	79.1	396.2	465.6

¹ Totex includes all costs except pension deficit recovery costs. This includes third party costs, operating lease adjustments, allowances related to the development of strategic regional water resource solutions and costs that are assumed to be recovered through grants and contributions.

Table 3.2 sets out the build-up of our totex allowance from base and enhancement costs. Base expenditure refers to routine, year on year costs, which companies incur in the normal running of their business. Enhancement expenditure refers to investment for the purpose of enhancing the capacity or quality of service beyond base level.

For draft determinations, we have changed the scope of costs included under base expenditure compared to the initial assessment of plans. Our base costs now include costs associated with the connection of new developments (ie new developments and new connection costs) and costs for addressing low pressure.

Table 3.2: Totex by wholesale price control and type of cost, 2020-25 (£ million, 2017-18 CPIH deflated prices)

	Our cost allowance			Company view
	Water resources	Water network plus	Total	Total
Base expenditure	63.8	303.8	367.6	424.1
Enhancement expenditure	5.3	16.3	21.6	34.4
Third party costs	1.3	5.7	7.0	7.0
Total – excluding pension deficit recovery	70.4	325.8	396.2	465.6
Pensions deficit recovery costs	0.0	0.0	0.0	0.0
Total	70.4	325.8	396.2	465.6

1. We display base costs under the new definition. Company business plan base costs exclude enhancement opex.

2. We are displaying pension deficit recovery costs separately as they are not included in the calculation for PAYG (see section 4).

3. Table 3.2 does not include operating lease adjustments, allowances related to the development of strategic regional water resource solutions. Any ex-ante cost sharing adjustments and costs that are assumed to be recovered through grants and contributions are also excluded. This is to allow a simpler comparison with base and enhancement costs. Table 3.6 sets out a reconciliation of inclusions and exclusions in totex for cost sharing and for the financial model.

4. The company view of pension deficit recovery costs is the full cost, not just the cost the company expects to include within price controls.

3.2 Base expenditure

Table 3.3 shows our challenge to company proposed base expenditure. We distinguish between ‘modelled base costs’ and ‘unmodelled base costs’. We challenge modelled based costs based on comparative assessment (using econometric models). Our efficiency challenge is based on cost performance within the sector as well as evidence from the wider economy.

Unmodelled base costs include business rates; abstraction charges and costs to meet the Traffic Management Act where applicable. Our assessment of these costs sits outside of our econometric models and we explain our approach in ‘Securing cost efficiency technical appendix’.

Bristol Water did not propose any costs to comply with the Traffic Management Act in its September 2018 business plan but does in its April 2019 business plan. The

company bases the costs on the forecast introduction of permit schemes in its area. The timing of the introduction of permit schemes has not been confirmed by the relevant highways authorities and the company does not provide sufficient evidence to explain its forecast number of permits. Due to this uncertainty we do not make an allowance for Traffic Management Act costs in our draft determinations.

At the initial assessment of plans we assessed Bristol Water's claim for costs to purchase water from the Canal & River Trust incorrectly. We treated it as part of abstraction charges and therefore as an unmodelled cost. We made an allowance only for the abstraction charges in our view of costs at the initial assessment of plans. For the draft determination we have further assessed the claim which relates specifically to the company's raw water purchase, and is separate from abstraction charges paid to the Canal & River Trust. The company responded to our queries and provided more information. However, we reject the claim at draft determination. The company does not demonstrate its current cost of water is atypical and uniquely high. The payment represents the most efficient source of supply for many of Bristol Water's customers, and there are economies of scale from obtaining 45% of supply from a single source. We consider our modelled allowance, which includes industry costs for sourcing water is sufficient for the current Canal & River Trust costs.

Table 3.3: Base totex expenditure, 2020-25 (£ million, 2017-18 CPIH deflated prices)

Price Control	Company business plan - base cost	Modelled base costs efficiency adjustment	Unmodelled base costs adjustment	Base cost allowance
Water Resources	70.6	-6.8	0.0	63.8
Water Network plus	353.5	-46.4	-3.3	303.8
Total	424.1	-53.2	-3.3	367.6

Note: Base costs include operating and maintenance costs as well as new development, new connections and addressing low pressure costs. Company business plan base costs exclude enhancement opex.

3.3 Enhancement expenditure

Table 3.4 summarises our allowances for enhancement expenditure.

Our draft determination allows Bristol Water £22 million to invest in improvements to service, resilience and the environment. Key parts of this allowance are:

- £9 million to install more than 48,000 more meters;
- £5.7 million investing in improving resilience of critical mains infrastructure;
- £4.5 million to improve the environment and meet the requirements of WINEP;
- £2.4 million to reduce leakage to levels beyond the industry's forecast upper quartile threshold; and
- £1.4 million to address the impact of deteriorating raw water quality.

However, the most material area of enhancement cost challenge for Bristol Water is in leakage. For leakage our expectation for base service levels is that an efficient company should achieve industry forecast upper quartile performance by 2024-25 in both normalised measures (per property and per kilometre of main). This performance is funded through the base allowance. We allow enhancement costs only where a company's performance commitment goes beyond the forecast upper quartile threshold. As this is achieved by Bristol Water, we allow some funding under enhancement, for the volume of leakage reduction delivered beyond the forecast upper quartile threshold the leakage reduction using the unit cost the company identifies to make the allowance. Our allowance is less than the company proposes as enhancement expenditure. Companies are able to earn outperformance payments if they deliver leakage reductions beyond their stretching performance commitment levels.

'Bristol Water - Cost efficiency draft determination appendix' sets out in more detail the cost allowances by investment area for each price control, and we give full details in our published models.

Table 3.4: Enhancement totex expenditure, 2020-25 (£ million, 2017-18 CPIH deflated prices)

Service	Company requested totex	Scope and efficiency adjustment	Our allowance
Water Resources	5.4	-0.1	5.3
Water Network plus	29.1	-12.8	16.3
Total	34.4	-12.9	21.6

3.4 Cost sharing

When a company overruns its totex allowance, the additional cost incurred above our allowance will be shared between its investors and customers. When a company spends less than its totex allowance, it will share the benefits with customers.

For the draft determinations we calculate each company's cost sharing rates based on the ratio of the company's view of costs in its September 2018 business plan relative to our view of efficient costs. For the final determinations we propose to calculate the company's view of costs based on a 50% weight on the company's final cost proposals in its representation to the draft determination and 50% weight on the September 2018 business plan. We explain our approach to calculating cost sharing rates in the 'Securing cost efficiency technical appendix'.

Table 3.5: Totex cost sharing for cost performance for 2020-25, %

	Water resources	Network plus – water
Cost sharing rate – outperformance	35.4%	35.4%
Cost sharing rate – underperformance	64.6%	64.6%

Table 3.6 sets out the costs that are subject to cost sharing. We apply cost sharing to net totex. Net totex excludes grants and contributions, costs of operating leases, strategic regional water resources development costs, third party costs and pension deficit recovery cost.

We adjust allowed costs to reflect a change in the accounting treatment of leases, which causes some assets formerly recognised as operating leases to be recognised on the company's balance sheet. In doing so, we have followed the approach set out in [IN 18/09 Guidance for reporting operating leases in PR19 business plans](#). We have used the adjustment to operating costs that the company proposed in its business plan.

Table 3.6: Totex subject to cost sharing rates – 2020-25, £ million¹

	Water resources	Network plus – water	Company view
Gross totex (excluding third party costs)	69.1	320.1	465.6
Grants and contributions	0.0	-6.5	-16.8
Operating leases adjustment	0.0	0.0	0.0
Net totex (subject to cost sharing)	69.1	313.7	448.8
Strategic regional water resource solutions ²	0.0	0.0	0.0
Third party costs	1.3	5.7	7.0
Ex-ante cost sharing adjustment	0.0	0.0	0.0
Net totex (for financial model)	70.4	319.3	455.8

¹ Table 3.6 does not include pension deficit repair expenditure, as this is not included in cost sharing.

² The standard totex cost sharing does not apply to strategic regional water resource solution expenditure, see 'Strategic regional water resources solution appendix' for more details.

3.5 Transition expenditure

Bristol Water does not request any expenditure under the transition programme.

3.6 Residential retail

We determine the residential retail control from the expenditure set out in Table 3.7, using an econometric modelling approach to set our allowance. The residential retail draft determination does not include any of our allowed pension deficit recovery costs. These costs are wholly allocated to wholesale controls.

Table 3.7: Expenditure, residential retail, 2020-25 (£ million, nominal)

	2020-21	2021-22	2022-23	2023-24	2024-25	Total
Residential retail, modelled allowance	10.1	10.1	10.1	10.1	10.1	50.3
Company view	9.6	9.9	10.1	10.2	10.3	50.0

Note: The residential retail control is an average revenue control. Allowed cost and the associated allowed revenue is based on a forecast of the number of customers. There will be an end-of-period true up based on the actual number of connected households.

3.7 Direct procurement for customers

We set out in our PR19 methodology that we expected company business plans to consider direct procurement for customers where this is likely to deliver the greatest value for customers. Direct procurement for customers promotes innovation and resilience by allowing new participants to bring fresh ideas and approaches to the delivery of key projects. Companies were to consider direct procurement customers for discrete, large-scale enhancement projects expected to cost over £100 million, based on whole-life totex.

There is sufficient evidence that there are no projects suitable for a direct procurement for customers process within Bristol Water's proposed plan. We expect Bristol Water to consider direct procurement for customers on future schemes to ensure delivery is via the most efficient route to ensure that customers receive the best value.

4 Calculation of allowed revenue

This section sets out the calculation of allowed revenue for each of the price controls, based on our assessment of efficient costs. We set out in section 4.1 the components of allowed revenue for each of the price controls. We then set out information relevant to the calculation of the components of that allowed revenue in sections 4.2 and 4.4.

4.1 Allowed revenue

We calculate revenue separately for each of the wholesale controls and for the residential retail control. We set out the calculation of five year revenues for each of these controls in this section.

Wholesale controls

For the wholesale controls (that is water resources and water network plus), allowed revenue is calculated based on the following elements, not all elements are applicable to all wholesale controls as set out in Table 4.1.

- Pay as you go (PAYG) – this reflects the allocation of our efficient totex baseline to costs that are recovered from revenue in 2020-25. The proportion of totex not recovered from PAYG is added to the regulatory capital value (RCV) which is recovered over a longer period of time.
- Allowed return on capital – this is calculated based on our assessment of the cost of capital multiplied by the average RCV for each year.
- RCV run-off – this reflects the amount of RCV that is amortised from the RCV in the period of the price control.
- PR14 reconciliations – this reflects the application of out/underperformance payments from PR14 through revenue adjustments in 2020-25.
- Grants and contributions – this represents revenue that we expect to be received from developers in respect of work undertaken by companies to service new developments. It will include income from connection charges and infrastructure charges. This does not necessarily agree to the total grants and contributions deducted from totex, as only the income relating to the price control is included here.
- Non-price control income – income from charges excluded from the price controls. For example, this includes bulk supplies, standpipes, unmeasured cattle troughs, and other services. We deduct the forecast income from these charges

from the allowed revenue, because costs relating to these charges are included in the calculation of allowed revenue.

- Revenue re-profiling – this reflects the change in revenue in 2017-18 prices as a result of adjustments made to annual revenues to smooth the final bill profile consistent with customer preferences. The financial model calculates revenue adjustments on a net present value (NPV) neutral basis.

We set out the calculation of the allowed revenue for Bristol Water’s wholesale controls in Table 4.1. We summarise the total of the build-up of allowed revenue as five year totals, however our financial model calculates the allowed revenue on an annual basis for the purposes of our draft determination. We state the allowed revenue for each price control on an annual basis in section 6.

We explain how we calculate PAYG, RCV run off and the allowed return on cost of capital in section 4.2, the revenue adjustments for PR14 reconciliations in section 4.3, and other elements of allowed revenue in section 4.4.

Table 4.1: Calculation of allowed revenue (£ million)

	Water resources	Water network plus	Total	Company view – total
Pay as you go	54.9	228.2	283.1	332.5
RCV run-off	14.1	113.4	127.5	128.7
Return on capital	15.5	53.0	68.5	80.8
Revenue adjustments for PR14 reconciliations	0.0	-8.4	-8.4	-7.6
Tax	0.0	10.0	10.0	12.7
Grants and contributions (price control)	0.0	6.5	6.5	16.8
Deduct non-price control income	0.0	-10.2	-10.2	-10.2
Revenue re-profiling	0.0	0.2	0.2	0.0
Final allowed revenues	84.4	392.8	477.2	553.6

We set out the calculation of allowed revenue for each wholesale control on an annual basis in the 'Bristol Water - Allowed revenue appendix' in Tables 1.1 to Table 1.2.

Residential retail control

For the residential retail control, allowed revenue is calculated as:

- Retail cost to serve – this reflects our efficient view of costs per customer for the retail business.
- Net margin on wholesale and retail activities – this is calculated based on the wholesale revenue applicable to residential retail customers, plus the retail cost to serve, with a net margin applied. Net margins are calculated excluding any adjustments to residential retail (see Table 4.2 below) – the full calculation is set out in our financial models.
- Our methodology set out an early view of the retail margin that applies for the retail price controls. This was used by Bristol Water in its business plan and is unchanged in our draft determination.

Allowed revenue for the residential retail control is set on a nominal basis and therefore we present the make-up of the allowed revenue in nominal prices in Table 4.2.

Table 4.2: Retail margins (nominal price base)

	2020-25	Company view 2020-25
Total wholesale revenue - nominal (£ million)	518.5	611.7
Proportion of wholesale revenue allocated to residential (%)	74.66%	74.66%
Residential retail costs (£ million)	50.3	50.0
Total retail costs (£ million)	437.4	492.8
Residential retail net margin (%)	1.00%	1.00%
Residential retail net margin (£ million)	4.4	5.0
Residential retail adjustments (£ million)	0.5	0.0
Residential retail revenue (£ million)	55.3	55.1

Note: retail revenue is the sum of the net margin, retail costs, and adjustments. Company view may not sum as this may include other adjustments.

Note: the proportion of wholesale revenue allocated to residential customers is provided by the company in the business plan tables. This is provided for each wholesale control separately, so although we have used the same proportions for each control as the company, our interventions on costs in each control mean that the combined proportion is slightly different.

We set out the calculation of residential retail revenue on an annual basis in the 'Bristol Water - Allowed revenue appendix' in Table 1.3.

4.2 Cost recovery now and in the long term for the wholesale controls

Our totex cost allowances are sufficient to meet an efficient company's operating and capital expenditure. Companies recover this expenditure either in period from current customers using PAYG or add it to the RCV and recover from future generations of customers using the RCV run-off rates. Consistent with our methodology, we assess how each company's choice of PAYG and RCV run-off rates reflect the levels of proposed expenditure, bill profiles, affordability and customer views relevant to the short and the long term.

To determine the allowed revenue, the PAYG rate is applied to the totex allowance for each wholesale control for each year of the price control. The proportion of the totex allowance that is not recovered in PAYG is added to the RCV and recovered from customers in future periods.

In this section we set out our approach to calculating the PAYG rates, the RCV to which the cost of capital is applied and the RCV run off rates.

PAYG

We calculate total PAYG totex for each year of each wholesale price control based on the totex allowance for each year multiplied by the relevant PAYG rate for that year. To this we add allowed pension deficit recovery costs to derive total PAYG revenue.

We summarise in Table 4.3 the average PAYG rates across 2020-25 for each wholesale control, and the calculation of total PAYG revenue. The PAYG rates shown in the table are a weighted average across the five years 2020-25, the annual PAYG revenue and PAYG rates for each wholesale control are shown in the 'Bristol Water - Allowed revenue appendix', Tables 2.1 to 2.2.

To PAYG totex we add the allowed costs for pension deficit recovery set out in Table 3.2 to derive total amount to be recovered in 2020-25 for each price control.

Table 4.3: PAYG allowances for each wholesale control (5 year)

	Water resources	Water network plus	Total	Company view - Total
Totex allowance (£ million)	70.4	319.3	389.7	448.8
Draft determination PAYG rate (%)	78.0%	71.5%	72.7%	
Pay as you go totex (£ million)	54.9	228.2	283.1	332.5
Pension deficit recovery cost (£ million)	-	-	-	-
Total pay as you go (£ million)	54.9	228.2	283.1	332.5
Company plan PAYG rate (%)	78.0%	73.2%		74.1%

Bristol Water's approach to PAYG rates in its business plan is to recover in each year an amount equivalent to operating costs and capitalised infrastructure renewal expenditure. We accept the approach taken by the company and have applied a technical intervention to amend the PAYG rates the company proposed to reflect our view of the mix of operating and capital expenditure following our totex interventions. We set out how we apply the technical intervention in 'Aligning risk and return

technical appendix' and we have published our calculation of the PAYG rates for each company alongside our draft determinations. The company proposes small changes to PAYG to profile bills and for financing considerations which has no material impact on allowed revenue. We accept the adjustment.

Our view of efficient totex is lower than the company's plan and contains a lower proportion of operating expenditure than the company proposed. Therefore, using Bristol Water's approach to recovering costs, a lower proportion of totex is recovered in the period through PAYG. We are not intervening on PAYG rates on the basis of financeability.

Opening RCV adjustments

As part of the business plan Bristol Water proposed allocations of the RCV for Water Resources price control based on Ofwat guidance. We are allocating the company's RCV between the existing wholesale controls and these new controls in accordance with the proportions proposed by Bristol Water.

We make reconciliation adjustments ('midnight adjustments') related to the company's performance against incentive mechanisms from previous price reviews and for land sales in order to determine the opening RCV for the period of the PR19 controls. We also adjust the RCV upwards to reflect a change in the accounting treatment of leases, which causes some assets formerly recognised as operating leases to be recognised on the company's Balance sheet. In doing so, we have followed the approach set out in [IN 18/09 Guidance for reporting operating leases in PR19 business plans](#). Bristol Water did not propose any adjustments.

Table 4.4: Opening RCV, 1 April 2020 (£ million)

	Water resources	Water network plus
RCV – 31 March 2020	541.2	
% of RCV allocated by control	22.07%	77.93%
RCV – 31 March 2020	119.4	421.8
Midnight adjustments to RCV	-3.4	-12.7
Midnight adjustments relating to operating leases	-	-
Opening RCV – 1 April 2020 (before fast-track reward)	116.1	409.1

Return on capital

Companies are allowed a return on the RCV, equal to the Weighted Average Cost of Capital (WACC).

Our PR19 methodology set out an 'early view' cost of capital for all wholesale controls. Bristol Water's April business plan incorporates the early view cost of capital with a company specific uplift on the cost of debt of 38 basis points, which falls into our plausible range of 25-40 basis points. This is a reduction from its previous business plan which proposed an uplift of 45 basis points. The reduction is due to the Bristol Water's proposed removal of the uplift of 15 basis points in the cost of new debt; the uplift on the cost of embedded debt remains the same at 55 basis points. Therefore, the company proposes the cost of capital for the wholesale price controls of 3.53% - CPIH deflated (2.52% - RPI deflated, compared with our early view cost of capital 3.30% CPIH deflated and 2.30% RPI deflated).

As set out in the PR19 methodology, we apply a three-stage approach to assessing whether we approve of the uplift. Detailed commentary on the assessment is set out in the 'Cost of capital technical appendix' that accompanies our draft determinations for slow track and significant scrutiny companies.

In summary, Bristol Water provides convincing evidence of customer support for the uplift. However, Bristol Water's claim is above our plausible range when calculated using the share of embedded debt in our draft determination, and we have some concerns over the robustness of the analysis used to underpin their 55 basis point uplift on the cost of embedded debt. In addition, the company does not provide convincing evidence that there are benefits that adequately compensate customers for the additional cost of providing an uplift. We assess that the company's proposal has only passed one of the stages of the three-stage approach for the cost of debt uplift. Overall the company has not therefore passed the assessment, and we have intervened to remove it in our draft determination.

We have updated our view of the cost of capital for the wholesale price controls to 3.08% – CPIH deflated (2.08% – RPI deflated). We set out the basis for the updated view in the 'Cost of capital technical appendix'. We have used our updated cost of capital in this draft determination.

The PR19 methodology confirmed we will transition to CPIH as the primary inflation rate from 2020. At 1 April 2020, we will index 50% of RCV to RPI; the rest, including totex that is added to the RCV, will be indexed to CPIH. Table 4.5 and Table 4.6 set out the opening and closing balance for each component of RCV.

The PR19 methodology confirmed our protection of the value of the RCV as at 31 March 2020 across each of the wholesale price controls. Totex that is added to the RCV from 1 April 2020 is stated as 'post 2020 investment'.

In determining the 'return on capital' revenue building block, we apply the relevant deflated cost of capital to the average RCV for the year for each component (RPI inflated, CPIH inflated and post 2020 investment). This results in a return on capital for each wholesale control over the period 2015-20 as set out in Table 4.7.

Table 4.5: Opening RCV by wholesale control for each component of RCV, 1 April 2020 (£ million)

	Water resources	Water network plus	Total
RPI inflated RCV	58.0	204.5	262.6
CPIH inflated RCV	58.0	204.5	262.6
Other adjustments	-	-	-
Total RCV	116.1	409.1	525.1

Table 4.6: Closing RCV by wholesale control for each component of RCV, 31 March 2025 (£ million)

	Water resources	Water network plus	Total
RPI inflated RCV	54.7	160.2	214.9
CPIH inflated RCV	52.2	155.6	207.8
Post 2020 investment	13.2	79.5	92.7
Other adjustments	-	-	-
Total RCV	120.1	395.3	515.4

Table 4.7: Return on capital by wholesale control for each component of RCV, 2020-25 (£ million)

	Water resources	Water network plus	Total
RPI inflated RCV	5.9	18.9	24.8
CPIH inflated RCV	8.5	27.6	36.0
Post 2020 investment	1.1	6.6	7.7
Other adjustments	-	-	-
Total return on capital	15.5	53.0	68.5
Company view – total return on capital	18.2	62.6	80.8

Note: Total return on capital is calculated by multiplying the annual average RCV for each element of RCV (RPI inflated, CPIH inflated and post 2020 investment) by the wholesale WACC for each control. The return on capital for each year of the price control for each wholesale control are shown in the 'Bristol Water - Allowed revenue appendix' in Tables 3.1 to 3.8 and 4.1 to 4.2.

RCV run-off

RCV run off is the proportion of the RCV which is recovered in the 2020-25 period. Companies are able to propose different run off rates for RPI inflated and CPIH inflated RCV and also for the water resources control for post 1 April 2020 investment. Table 4.8 sets out the resultant RCV run off revenue for each component of RCV for each wholesale control.

Table 4.8: RCV run off on the RCV (5 year) (£ million)

	Water resources	Water network plus	Total
CPIH inflated RCV	5.8	48.9	54.8
RPI inflated RCV	6.0	52.9	58.9
Post 2020 investment	2.2	11.6	13.9
Total RCV run off	14.1	113.4	127.5
Company view – total RCV run off	14.3	114.4	128.7

Note: Total RCV run off is calculated by multiplying the opening RCV by the relevant RCV run off rate for each element of RCV (RPI inflated, CPIH inflated and post 2020 investment) by the RCV run off rate for each control (50% of run off is applied to post 2020 investment in the year of additions).

Bristol Water's approach in its business plan to setting RCV run off rates is initially based on current cost depreciation as a proportion of RCV. The company has then proposed to reduce RCV run-off rates to partially reverse the impact of transitioning price determinations to the CPIH inflation measure. The company has limited this reduction to RCV run off rates to balance customer bills across 2020-25 and 2025-30 and to assist financeability. We accept Bristol Water's RCV run off rates for the draft determination. However, the interventions to allowed totex changes the post-2020 investment added to RCV and therefore the total RCV run off. Table 4.9 sets out the average RCV run off rates across 2020-25 for each wholesale control proposed in the company's business plan and for our draft determination.

Table 4.9: RCV run off rates for each wholesale control (5 year)

	Water resources	Water network plus
Original company plan (%)	2.37%	5.47%
Draft determination (%)	2.34%	5.47%

Note: RCV run off (%) reflects the average of the rates applied to the CPIH and RPI inflated RCV components across the 5 years 2020-25.

Where there are different RCV run off rates for post-2020 investment RCV, or CPIH inflated RCV for the water network plus control, compared to other elements of RCV, interventions to allowed totex and to PAYG rates may result in average RCV run off rates varying between the company plan and the draft determination. The annual

rates for each wholesale control are set out in the 'Bristol Water - Allowed revenue appendix' in Table 5.1 to Table 5.2.

4.3 PR14 reconciliations

In PR14, we set mechanisms to incentivise companies to do the right thing for their customers. These financial incentives cover cost efficiency, outcomes performance, revenue forecasting (wholesale and retail), customer service (the service incentive mechanism), water trading and land sales. It is important to reconcile the financial impacts of these mechanisms in PR19 to ensure that customers only pay for the service the company delivers.

We are also applying adjustments to reflect performance in the final year of the 2010 to 2015 period, which could not be fully taken into account in PR14. These adjustments apply to the RCV (the 'midnight adjustment') and revenue for the 2020-25 period. These adjustments are made in line with the ['PR14 reconciliation rulebook'](#).

We are publishing models for each of these reconciliations, and for the overall RCV and revenue adjustments on our website. 'Bristol Water - Accounting for past delivery actions and interventions' provides a detailed explanation of all policy interventions we are making in the models. Table 4.10 summarises our interventions. Table 4.11 sets out the resulting adjustments to revenue and the RCV. The 'Bristol Water - Accounting for past delivery appendix' sets out how these adjustments are allocated across controls and how the RCV adjustment feeds into the midnight adjustments to RCV set out in Table 4.4.

We are publishing the results of the reconciliation of the service incentive mechanism for all companies alongside the draft determinations for slow track and significant scrutiny companies in the 'Accounting for past delivery technical appendix'.

For outcome delivery incentives, the information we have used to reflect performance in 2019-20 is based on the company's latest expectations. Final figures for 2019-20 will not be able to be taken into account in PR19. We set out in the ['PR14 reconciliation rulebook'](#) that we planned to complete the reconciliation for 2019-20 outcome delivery incentives at PR24 for 2025-30 so that we use final information.

However, most outcome delivery incentives for the 2020-25 period are in period and will have been reconciled before this date. In light of this we consider it would be more appropriate to complete this reconciliation in the autumn of 2020 and apply any change to bills for 2021-22 as part of the new in-period process. We will designate all of the financial PR14 performance commitments as being in-period for this purpose.

Any adjustment between the 2019-20 forecast and actual figures should be modest and we would not expect a significant impact on bills. If, contrary to expectations the bill impact were to be more significant, we would expect companies to take measures to smooth the impact for their customers. The new PR19 mechanism to share benefits with customers from unexpected high outcome delivery incentive payments in a year will not apply to PR14 outcome delivery incentives. Instead the PR14 protection that caps the impact across the five years 2015-20 will apply.

The above applies equally to the company's 2015-20 in period outcome delivery incentives and we have used forecast information for 2018-19 and 2019-20 to reconcile these outcome delivery incentives. For the avoidance of doubt, no application is required in 2019 for in period determinations.

Table 4.10: Reconciliation of PR14 incentives, interventions (2017-18 prices, unless otherwise stated)

Incentive	Intervention(s)
Outcome delivery incentives	No interventions required.
Residential retail revenue	We are including a figure of 3.81% for the 'Materiality threshold for financing adjustment - Discount Rate' so it is consistent with Competition and Markets Authority's (CMA) determination of Bristol Water's cost of capital. Our intervention does not result in any changes to the total residential retail revenue payment at the end of the 2015-20 period because the materiality threshold is not exceeded.
Wholesale revenue forecasting incentive mechanism	No interventions required.
Totex	We are intervening to change the PAYG figures so they are consistent with the Competition and Market Authority's (CMA) determination. We are recalculating wholesale water baseline totex using the final determination figures for 3rd party allowances expressed to 3 decimal places. Overall, our minor interventions decrease the RCV adjustment at the end of the period from - £8.247 million to - £8.239 million and the revenue adjustment at the end of the period from - £2.570 million to - £ 2.569 million.
Land sales	No interventions required.
Service incentive mechanism	We are intervening to set Bristol Water's service incentive mechanism adjustment to +0.16% of household retail revenue to reflect its performance from 2015-16 to 2018-19. This equates to £0.086 million in total revenue over the period. This increases revenue relative to the company's estimate of the mechanism's impact.
PR09 blind year adjustments	No interventions required.

Table 4.11: Reconciliation of PR14 incentives, 2020-25 (£ million, 2017-18 prices)

Incentive	RCV adjustments		Revenue adjustments	
	Company view	Ofwat view	Company view	Ofwat view
Outcome delivery incentives	-0.8	-0.8	-7.6	-7.6
Residential retail revenue	N/A	N/A	0.4	0.4
Wholesale revenue forecasting incentive mechanism	N/A	N/A	2.5	2.5
Totex	-8.2	-8.2	-2.6	-2.6
Land sales	-2.2	-2.2	N/A	N/A
Service incentive mechanism	N/A	N/A	0.0	0.1
PR09 blind year adjustments	-4.9	-4.9	-0.3	-0.3
Water trading	N/A	N/A	0.0	0.0
Total	-16.1	-16.1	-7.5	-7.4
Total post profiling	N/A	N/A	-8.1	-7.9

Total post profiling is the total revenue over the period, taking account of the time value of money and the company's choices of how it wishes to apply revenue adjustments either in the first year or spread over a number of years.

These reconciliations are based on data from the 1 April company submissions. We will update these reconciliations to reflect the July data submissions for the final determinations.

4.4 Other allowed revenue

Other components of allowed revenue are:

- Corporation tax allowance – this is estimated from projected corporation tax rates, profit forecasts and assumed levels of tax relief contained in our financial model for the draft determination.
- Grants and contributions – this represents revenue that we expect to be received from developers in respect of work undertaken by companies to service new developments. It will include income from connection charges and infrastructure charges.

- Non-price control income – this forecast income is deducted from the total allowed revenues, as this revenue is not recovered from the charges covered by the price control – but is expected to cover some of the costs included in the calculation of the price control.

Table 4.12: Calculation of other allowed revenue (£ million)

	Water resources	Water network plus	Total	Company view - total
Tax	0.0	10.0	10.0	12.7
Grants and contributions (price control)	0.0	6.5	6.5	16.8
Deduct non-price control income	0.0	-10.2	-10.2	-10.2

Taxation

We calculate a tax allowance reflecting the corporation tax that the company expects to pay in 2020-25. We calculate the tax allowance using our financial model based on the projected taxable profits of the appointed business and the current UK corporation tax rates and associated reliefs and allowances.

Bristol Water provided information in data tables relevant to the calculation of the expected tax charge. The information has been updated as part of the resubmission of various data tables to take account of the recent changes to capital allowances. We have accepted the information provided by the company and applied this to the draft determination.

Our interventions in other areas may impact on forecast levels of capital expenditure and in the area of new connections our assumed recovery rates may differ from what Bristol Water assumes in the business plan. The resulting impact on allowances used for the calculation of taxation has not been reflected. Where these changes result in significantly different inputs for capital allowances or tax deductions, we expect Bristol Water to identify this as part of its representations on the draft determination.

Table 4.13: Calculation of other allowed revenue (£ million) - Tax

	Water resources	Water network plus	Total	Company view - total
Tax	0.0	10.0	10.0	12.7

Grants and contributions (price control)

Companies receive grants and contributions from developers towards the costs of 'new developments', expenditure to reinforce the network, and 'new connections', expenditure to connect a property, for example the meter and connection pipe. We calculate the grants and contributions receivable by applying a recovery rate to our view of new developments and new connections expenditure. This ensures that developers pay a fair share towards costs to connect new properties. We use this calculation of grants and contributions receivable from developers to ensure that the amounts billed to water customers correctly reflect only that share of any new development spend which should be borne by them.

The recovery rates are calculated as follows:

- For water new developments we use the rate implied by the Bristol Water business plan which is 10.6%; and
- For water new connections we use a rate of 100% based on our understanding of historical practice in the industry and is broadly supported by company business plans.

Table 4.14 shows our assumed amounts of grants and contributions. Our view of new developments and new connections expenditure is lower than Bristol Water's forecast. The reasons behind the differences in our view of 'Base expenditure' are set out above in the 'Cost allowances' section. This gives a lower view of grants and contributions than the company forecast.

For diversions activities, where companies move their assets to make way for new infrastructure, we use the company view of the associated income and assume that this represents 100% of the costs. In modelling our draft determinations we assume that all diversions income is inside the price control. For the final determinations we consider that we should make a distinction between diversions that are inside or outside the scope of section 185 of the Water Industry Act 1991. Works that are outside the scope of section 185 are, for example, works under the New Roads and Street Works Act 1991 or those associated with High Speed 2. We are yet to have sufficient data to be able to distinguish section 185 diversions from non-section 185 diversions. For the final determination we will assume diversions expenditure is

inside the price control unless it relates to non-section 185 diversions. Where companies forecast diversions works outside of section 185 then they should provide details of the income relating to this, on an annual basis, in the data request that accompanies the draft determination. This should be returned with the representations to the draft determination.

Table 4.14: Calculation of other allowed revenue (£ million) – Grants and contributions

	Water resources	Water network plus	Total	Company view - total
Grants and contributions	0.0	6.5	6.5	16.8

Non-price control income

Non-price control income is income from the excluded charges defined in licence condition B. For example, it includes bulk supplies, standpipes, unmeasured cattle troughs, and other services. This is deducted from the total allowed revenues, as this revenue is not recovered from the charges covered by the price control – but is expected to cover some of the costs included in the calculation of the price control.

We have reviewed the company forecast of ‘non-price control income’ and use this in the draft determination.

Table 4.15:3 Calculation of other allowed revenue (£ million) – Non-price control income

	Water resources	Water network plus	Total	Company view - total
Non-price control income	0.0	-10.2	-10.2	-10.2

Note: negative numbers represent a deduction from the allowed revenue.

Uncertainty mechanisms

The PR19 methodology makes limited provision for companies to propose bespoke uncertainty mechanisms. Bristol Water proposed an uncertainty mechanism for uncertainty associated with charges related to abstraction from the Gloucester and Sharpness Canal, which is subject to a formal arbitration process with the Canal & River Trust.

We have assessed that Bristol Water's claim passes the assessment criteria we have used to assess uncertainty mechanisms as set out in the initial assessment of plans Risk and return technical appendix:

- Materiality – Pass - Bristol Water sets out that abstraction from the canal covers about 45% of its supply requirements. The company considers alternative sources are not likely to be plausible in the short term and would be very expensive. The company provides evidence that the potential change in costs could be higher or lower than current arrangements and could be material.
- Beyond management control – Pass - the revised charging arrangements are to be settled by arbitration and so pass this criterion.
- Customer protection – Pass - Bristol Water proposes that customers should bear 75% of the increased costs if the materiality test for an interim determination set out in Condition B of its licence is passed. It also proposes a symmetrical cost saving for customers in the event of a material reduction in costs.

The notified item will only cover increased costs for the period from 1 April 2020 to 31 March 2025; costs incurred before 1 April 2020 are excluded.

Any costs that are subject to the sharing arrangement under the notified item will be excluded from the normal totex sharing adjustments at PR24. However, in the absence of an interim determination under the notified item, all Gloucester and Sharpness Canal abstraction costs would be included in the normal totex cost sharing arrangements. We expect to set out the process for any adjustments that might be required at PR24 in the PR19 reconciliation rulebook.

We seek the following commitments from Bristol Water in its response to the draft determination:

- Bristol Water should reflect any changes to charge levels for abstracting water from the Gloucester and Sharpness Canal (whether an increase or a decrease) in its annual performance reporting.
- In the event of an interim determination that increases its baseline revenue allowances, to collect only 75% of the increased amount in accordance with its proposal. We propose this to be achieved through adjustments to targeted revenue in the revenue forecasting incentive for Bristol Water.

5 Assurance, returns and financeability

This section sets out the accountability the company's Board has demonstrated for delivering its plan, the accuracy and consistency of the information within the plan and company proposals for aligning the interests of company management and investors with its customers. We summarise Bristol Water's response to our actions on securing confidence and assurance, including Bristol Water's proposals in response to our 'Putting the sector in balance: position statement'. We comment on the possible range of returns for the notional financial structure. We comment also on the financeability of the draft determination and any adjustments that we have made to the bill profile.

5.1 Assurance

The PR19 methodology set out that stakeholders should have confidence in the information presented in business plans. We set expectations that:

- the data and information presented in the plan must be subject to good assurance processes to ensure it is consistent and accurate; and
- a company's full Board should own, be accountable for and provide assurance of the business plan.

In the initial assessment of plans, we identified three actions in relation to Bristol Water's data tables and financial model. Bristol Water has satisfactorily responded to two of these actions as set out in its response to our actions on securing confidence and assurance. For the remaining advised action, we are intervening to use our cost of capital assumptions in the draft determination financial model.

We also had concerns with three of the Bristol Water's forward-looking Board assurance statements and included actions for the Board to provide restated assurance statements covering the areas of meeting its statutory and licence obligations, large investments and its governance and assurance processes for delivering resilience.

Bristol Water has since provided compliant Board assurance statements on all of these topics.

5.2 Putting the sector in balance

In July 2018 we published our ‘Putting the sector in balance: position statement’. The position statement set out the steps we expect companies to take to demonstrate they strike the right balance between the interests of customers and their investors. In summary, we expect that:

- company dividend policies for their actual financial structures and performance related executive pay policies show appropriate alignment between returns to owners and executives and what is delivered for customers²;
- companies with high levels of gearing will share financing gains from high gearing with customers; and
- companies provide assurance and supporting evidence to demonstrate their long term financial resilience and management of financial risks for the actual financial structure.

We also encouraged companies to adopt voluntary sharing mechanisms, particularly where, for example, companies outperform our cost of debt assumptions.

Our assessment of Bristol Water’s proposals is in Table 5.1.

Table 5.1: Our assessment of Bristol Water’s proposals to balance the interests of customers

Issue	Our assessment
Gearing outperformance benefit sharing	Bristol Water does not expect its gearing to exceed 70%, it forecasts average gearing around 67% over 2020-25. The company confirms it will adopt our benefit sharing mechanism, should gearing increase beyond 70%. The company proposes its gearing calculation will exclude £12.5 million of preference shares, as it considers these specific historical financing arrangements can be considered an element of equity, rather than debt in some circumstances. We do not accept that treating preference shares as equity for the purposes of the calculation is in the customer interest as it is unlikely interest payments on preference shares could be reduced to reflect, for example, circumstances related to poor performance or to maintain financial resilience. We expect the company to adopt our gearing outperformance mechanism.
Voluntary sharing mechanisms	Bristol Water proposes a voluntary sharing mechanism that would see up to 100% of their view of the company-specific adjustment to its cost of capital over 2020-25 re-invested. 50% of this figure would be reinvested if the company was not one of the top 3 England & Wales water companies in a UKCSI index. Another 50% of this value would be reinvested if its ‘Community stakeholder satisfaction with initiatives’ survey score fell below 75%. Other than as a potential part of the voluntary sharing mechanism, Bristol Water does not propose a company contribution to social tariffs, payment matching, or hardship funds.

² We explain more fully our expectations in the ‘Aligning risk and return technical appendix’ that accompanies this draft determination.

Issue	Our assessment
Dividend policy for 2020-25	<p>Bristol Water has committed to the expectations on dividend policy as set out in our 'Putting the sector in balance: position statement'. In doing so its September business plan indicated a base dividend yield of 3.2% with 1.3% annual growth for 2020-25. It has confirmed that the base dividend will be adjusted to reflect the actual outcome and expenditure performance of the business, with reference to its business plan.</p> <p>The company has committed to publishing details of how the dividend policy has been applied in its Annual Performance Report and other documents, including any changes to the dividend policy.</p> <p>However insufficient detail has been provided on which obligations or commitments to customers will be considered, and how they will affect dividend payments. We expect the company to be transparent in this area, to demonstrate that in paying or declaring dividends it has taken account of the factors we set out in our position statement and we expect the company to be clear about how it will take account of the particular risks to its long term financial resilience as set out below. We also expect the company to demonstrate that its dividend policy takes account of performance in delivery against the final determination along with wider obligations. We expect the company to respond to these issues in its response to our draft determination.</p>
Performance related executive pay policy for 2020-25	<p>Bristol Water states that it will adopt the expectations on performance related pay as set in our 'Putting the sector in balance: position statement'. Its states that the policy, which is currently being amended by the remuneration committee, contains:</p> <ul style="list-style-type: none"> • An annual bonus (ACIP) and a long term bonus (LTIP), both of which contain linkages to delivery for customers. • At least 50% of the annual and long term are expected to be linked to outperforming efficient cost allowances including the expected 30% of bonus allocated to customer outcome metrics. The customer metrics are expected to include C-Mex, leakage, metering, water quality, interruptions. • Targets will be stretching for customers, reflected through the service levels in the performance commitments in the business plan. • The policy will be overseen by the remuneration committee and full details of the policy and how it has been applied will be published in the Annual Performance Report together with any changes and the underlying reasons for the change. <p>We understand that there remain a number of details to be finalised, for example the exact structure and weightings of the measures within the annual and long term bonus schemes, and how they demonstrate a linkage to substantial service delivery for customers. The proposed policy, if approved, demonstrates the company's commitment to move in the direction of the expectations set out in 'Putting the sector in balance: position statement'. We expect Bristol Water to provide an update on this in response to its draft determination.</p> <p>We expect Bristol Water to demonstrate that its policy on performance related executive pay demonstrates a substantial link to stretching performance delivery for customers through 2020-25. We expect the company and its remuneration committee to ensure executives have stretching targets linked to performance delivery for customers and that</p>

Issue	Our assessment
	<p>any further updates to the policy for 2020-25 are transparently reported to stakeholders in its Annual Performance Report.</p>
<p>Financial resilience of the company's actual financial structure</p>	<p>Bristol Water has provided an updated Board assurance statement that its plan is financeable on the basis of both its notional and actual financial structures. It has reduced its gearing from 71% to 64% in the period from 2015 to 2018 and adopted our high gearing benefit sharing mechanism.</p> <p>The company has confirmed in its revised Board assurance statement that the revised business plan is financeable on the actual structure. The Board assurance statement sets out its view that the company's governance and assurance processes will deliver financial resilience over the next control period and the long term.</p> <p>Bristol Water anticipates a rating downgrade to one notch above the minimum investment grade based on its forecast actual financial ratios, but considers that a credit rating of Baa2 for 2020 to 2025 would provide sufficient headroom for financial resilience. It says that it will not require additional equity injection to maintain this rating. Bristol Water says it will only need to raise additional debt of £9 million over 2020-25. In addition it believes that the cost difference of a lower rating should be minimal.</p> <p>The assessment of financial resilience does not take account of our interventions in Bristol Water's business plan, which includes, for example, our updated view of the cost of capital (which excludes the company specific cost of debt claim), our assessment of efficient costs and our assessment of outcome delivery incentives. Each company is responsible for ensuring its capital and financial structure allows it to maintain financial resilience over the short and the long term and so we expect Bristol Water to take account of these issues in its commentary on its long term financial resilience in response to our draft determination, taking account of the reasonably foreseeable range of plausible outcomes of the final determination, including evidence of further downward pressure on the cost of capital in very recent market data as we discuss in the 'Cost of capital technical appendix'.</p> <p>The company should provide further detail and Board assurance about its plans to maintain its long term financial resilience in the context of our draft determination, with specific reference to its limited headroom in key financial ratios and risks to its credit rating.</p> <p>In its future reporting Bristol Water should undertake suitably robust stress tests to support its long term viability statements. We will continue to monitor Bristol Water's financial resilience reporting through 2020-25.</p>

5.3 Return on regulatory equity

The PR19 methodology sets out that we expect companies to demonstrate a clear understanding of risk to the delivery of their business plans and to explain and demonstrate how they manage and mitigate risk. We expect companies to use Return on Regulatory Equity (RoRE) analysis to assess the impact of upside and

downside risk on the basis of their notional capital structures based on a prescribed suite of scenarios using P10/P90 confidence limit values³.

RoRE is calculated as the return on equity for the equity portion of the RCV based on our notional gearing assumption. A company's base RoRE is aligned with our allowed real post-tax cost of equity, but can differ between companies because the blended real cost of equity will vary according to the proportion of the RCV (and notional regulatory equity) that is indexed to RPI or CPIH⁴. The proportion of RCV (and notional regulatory equity) that is linked to RPI or CPIH will vary between companies according to factors that include the size of the investment programme, the proportion of totex that is capitalised and RCV run-off rates.

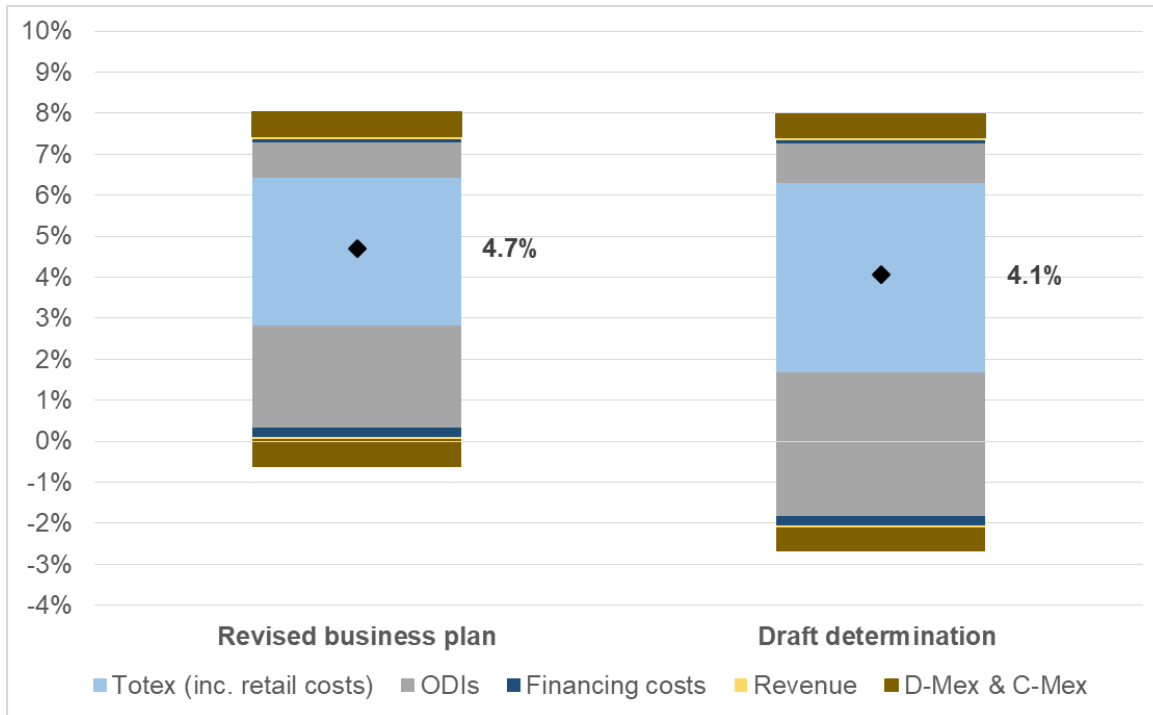
Table 5.2 sets out the annual average RoRE ranges in Bristol Water's updated PR19 business plan submission, and the values in our draft determination. The base RoRE in our draft determination reflects our updated cost of equity. The RoRE ranges reflect our interventions outlined below, and other interventions we are making as part of our draft determination.

³ P90 is the performance threshold at which there is only a 10% chance of outturn performance being better. P10 is the performance threshold at which there is only a 10% chance of outturn performance being worse.

⁴ RPI is the retail price index; CPIH is the consumer price index including owner-occupiers' housing costs; both are published by the Office for National Statistics.

Table 5.2: Bristol Water RoRE ranges

	Updated Business plan (Apr 19)		Draft determination ranges reflecting our interventions	
Base RoRE	4.7%		4.1%	
Risk ranges	Lower bound	Upper bound	Lower bound	Upper bound
Totex	-1.47%	1.36%	-1.95%	1.86%
Outcome delivery incentives	-2.48%	0.88%	-3.51%	0.97%
Financing costs	-0.22%	0.07%	-0.22%	0.07%
Retail costs	-0.43%	0.35%	-0.43%	0.36%
D-Mex & C-Mex	-0.68%	0.60%	-0.59%	0.59%
Revenues (includes Retail)	-0.05%	0.06%	-0.05%	0.06%
Total	-5.33%	3.32%	-6.76%	3.92%

Figure 5.1: RoRE ranges

The draft determination risk ranges shown in Table 5.2 and Figure 5.1 reflect one intervention we are making with respect to values in Bristol Water's updated business plan:

- We are intervening to align the RoRE risk ranges for outcome delivery incentives shown in Table 5.2, Figure 5.1, and in the PR19 financial model with the RoRE risk range values for outcome delivery incentives set out in section 2 (Outcomes). The revised values reflect our interventions on outcome delivery incentives under the Outcomes Framework which seek to take account of covariance of performance on individual outcome delivery incentives in the presentation of the overall outcome delivery incentive range.

In all other areas we have retained Bristol Water's proposed RoRE range. There is a negative skew overall, driven primarily by outcome delivery incentives. Our view is that an efficient company should be able to achieve the base equity return on the notional structure. We expect Bristol Water to consider necessary revisions to its overall RoRE range in response to the draft determination.

5.4 Financeability

We interpret our financing duty as a duty to secure that an efficient company can finance the proper carrying out of its functions, in particular by securing reasonable returns on its capital. In coming to our determinations we assess whether allowed

revenues, relative to efficient costs, are sufficient for a company to finance its investment on reasonable terms and to deliver activities in the long term, while protecting the interests of current and future customers.

Our PR19 methodology required companies to provide Board assurance that the business plan is financeable on both the notional and their actual capital structures. Our methodology required companies to provide evidence to support these statements, including evidence supporting the target credit rating and that this is supported by the financial ratios that underpin the plan. Bristol Water's Board has provided assurance that it has challenged the key assumptions within the business plan, and that both notional and actual capital structures remain financeable in the long-term, and that the plan protects customers' interests in the short and long term.

We consider that companies and their shareholders should bear the risk of their capital structure and financing choices, not customers. Therefore, we have focused on whether our draft determination is financeable based on the notional capital structure that underpins our cost of capital using our own financial model.

Our financeability assessment uses a suite of financial metrics based on those used in the financial markets and by the credit rating agencies. We base our assessment of financeability of the notional company using our updated cost of capital excluding the company specific adjustment proposed by the company. Based on the financial ratios from the financial model alongside evidence in the business plan, we consider that Bristol Water's draft determination is financeable for the notional structure.

The results for key financial ratios are set out below. Key financial ratios for the notional company structure in our draft determination are broadly consistent with the ratios set out by Bristol Water in its business plan. This is a result of the lower levels of capital investment assumed in our draft determination, which results in RCV reducing in real terms by -2% over the period and gearing falling for the notional structure.

Table 5.2: Financial ratios – notional structure before reconciliation adjustments (5 year average)

	Business plan	Draft determinations
Gearing	58.48%	59.30%
Interest cover	4.65	5.02
Adjusted cash interest cover ratio (ACICR)	2.50	2.51
Funds from operations (FFO)/Net debt	14.26%	13.23%
Dividend cover	3.25	2.63
Retained cash flow (RCF)/Net debt	12.17%	11.00%
Return on capital employed (RoCE)	6.95%	6.15%
<p>The basis of the calculation of the ratios is set out in the PR19 methodology</p> <p>Net debt represents borrowings less cash and excludes any pension deficit liabilities.</p> <p>FFO is cash flow from operational activities and excludes movements in working capital.</p> <p>Cash interest excludes the indexation of index-linked debt.</p> <p>Bristol Water submitted financial ratios in the business plan tables for the notional company after taking account of reconciliation adjustments. We set out in the table the ratios excluding these adjustments consistent with our assessment of notional financeability. We have agreed the recalculation of the ratios with the company.</p>		

As set out in section 4 we have amended PAYG rates to reflect our view of efficient totex and the mix of operating and capital expenditure. The adjusted cash interest cover ratio is affected by Bristol Water's accounting policy of capitalising part of its infrastructure renewal expenditure and the allocation of this to PAYG revenue as this is treated as fast money within the calculation of the ratio. We discuss the impact of fast money on financial ratios in the 'Aligning risk and return technical appendix'.

We are not intervening to amend RCV run off rates however interventions to allowed totex and to PAYG rates will change the level of post-2020 additions to RCV. This may affect the average RCV run off rates and result in movements between the original plan and the draft determination shown in Table 5.4. The reduction in expenditure means that the RCV will now decrease by marginally more than set out in the original business plan.

Table 5.3: PAYG rates, RCV run off and RCV growth

	PAYG	RCV run off	RCV growth
Company plan	74.1%	4.76%	-0.36%
Draft determinations	72.7%	4.76%	-1.85%

Bristol Water is responsible for the financeability of the company and the maintenance of long term financial resilience under its actual structure. We comment further on the financial resilience of the company's actual structure in Table 5.1.

We expect companies to provide further Board assurance that they will remain financeable on a notional and actual basis, and that they can maintain the financial resilience of their actual structure, taking account of the reasonably foreseeable range of plausible outcomes of their final determination including evidence of further downward pressure on the cost of capital in very recent market data as we discuss in the 'Cost of capital technical appendix'.

6 Affordability and bill profile

6.1 Bill profile

Bristol Water's bill acceptability research, undertaken in spring 2019 with a representative sample of 400 customers, outlines that 93% of customers find its real terms bill to be acceptable and 83% find nominal bills acceptable. The company's research clearly shows bills over time and links them to the service levels it proposes to adopt. The exercise is assured by its customer challenge group which states 'the Challenge Panel considers that the survey met with social research best practice. The Challenge Panel also considered the updated Acceptability engagement achieved sufficient accuracy and demographic spread'.

Taking account of its acceptability results, the fact it tests nominal bills and multiple bill profiles and the clear information given to customers to help them form views on bills, Bristol Water provides sufficient evidence on the acceptability of its bills.

The company tests its bill profile over the 2020-30 period and puts forward a bill profile that resembles one that is supported by 15% of customers. The profile provides a bill cut in the years 2020-25 and an increase in 2025-30. In the same testing, the company gains support from 53% of customers for a smoothed bill profile over 2020-30, which gives an incrementally falling bill across the whole period. The company justifies picking the former by stating that its qualitative research shows the preference for the smoothed profile is not strong.

The average bill profile put forward by Bristol Water falls throughout the 2020-25 period, with a total reduction of 6.0%. Our amended profile increases this to a reduction of 15.5%. The table below sets out the difference in bills between the company's submission and our amended draft determination figures. We adjust the bill profile so that it provides a larger drop in 2020-21 followed by flat bills during 2020-25. This should allow a smoother transition to 2025-30.

Table 6.1: Bills in real terms

	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Company plan	£183	£175	£174	£174	£173	£172
Bill profile – before re-profiling	£183	£157	£156	£155	£153	£152
Draft determinations	£183	£155	£155	£155	£155	£155

In its business plan, the company sets out its intention to increase bills by 2% between 2024-25 and 2025-26 before reducing bills over 2026-30. In response to an action we gave the company in January 2019, Bristol Water undertakes quantitative bill profile testing and re-profiles its bills over the whole 2020-30 period.

Table 6.2: Long term bills

	2020-25	2025-30
Company view of plan	£174	£172

6.2 Help for customers who are struggling to pay

Our draft determinations for Bristol Water will deliver a real terms reduction to the average bill between 2020 and 2025.

In addition, Bristol Water commits to:

- increase the number of customers that receive support through social tariffs and WaterSure from around 17,000 in 2019-20 to 25,000 by 2024-25;
- seek support from its customers to meet its ambitions on delivering social tariffs as the company will need to increase its cross-subsidy from the current £1.75 to £2.12 before 2024-25. We expect the company to meet its proposed performance level, irrespective of the funding mechanism;
- continue to provide direct funding to debt advice partners who assist its customers; and
- undertake data mapping to better understand risks to customers in vulnerable positions and provide a more tailored service.

Bristol Water has three bespoke performance commitments on affordability, which will require it to:

- Improve customer views of value for money;
- Increase the number of customers it reaches through social tariffs and WaterSure from 17,000 in 2020 to over 25,000 in 2025; and
- Maintain high satisfaction among customers receiving vulnerability assistance.

Companies will be reporting their performance against the Priority Services Register (PSR) common performance commitment and their bespoke affordability and vulnerability performance commitments to us and their customers on an annual basis during the price control period. In addition, companies put forward in their business

plans further measures for addressing affordability and vulnerability issues. We expect companies to report periodically to their customers on their progress in addressing affordability and vulnerability concerns. We will also be considering how we will scrutinise and report on companies' progress in this important area, including working with other stakeholders in the water sector and beyond.

6.3 Total revenue allowances and k factors

Table 6.3 summarises the allowed revenue for each control. This is expressed in a 2017-18 CPIH price base so that this can be compared with the rest of this document.

Table 6.3: Allowed revenue by year (£ million, 2017-18 prices)

	2020-21	2021-22	2022-23	2023-24	2024-25	Total
Water resources	16.2	16.5	16.9	17.3	17.6	84.4
Water network plus	76.7	77.7	78.4	79.5	80.4	392.8
Residential retail	10.4	10.2	10.0	9.9	9.7	50.3
Total	103.3	104.4	105.4	106.7	107.7	527.5

The water resources and water network plus controls are in the form of a percentage limit (inflation plus or minus a number that we determine for each year of the control (the 'K' factor)) on the change in allowed revenue (R) from the previous charging year (t-1). This is based broadly on the formula:

$$R_t = R_{t-1} \times \left[1 + \frac{\text{CPIH}_t + K_t}{100} \right]$$

Table 6.4 sets out the K factors in each year for each of these two controls. For the first year, we have set a 'base' revenue which will be used as the starting revenue for calculating 2020-21 allowed revenues.

Table 6.4: Base Revenue and K factors by charging year (2017-18 prices)

	Base (£ million)	2020-21	2021-22	2022-23	2023-24	2024-25
Water resources	16.2	0.00%	1.82%	2.54%	2.32%	1.59%
Water network plus	76.7	0.00%	1.31%	1.03%	1.42%	1.20%

Ofwat (The Water Services Regulation Authority) is a non-ministerial government department. We regulate the water sector in England and Wales. Our vision is to be a trusted and respected regulator, working at the leading edge, challenging ourselves and others to build trust and confidence in water.

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July 2019

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