December 2020

# PR24 and beyond: Our reflections on lessons learnt from PR19

Ofwat

# PR24 and beyond: Our reflections on lessons learnt from PR19

# About this document

This document sets out our reflections on lessons learnt from PR19. The target audience is water companies, governments, other regulators and wider stakeholders with an interest in what we can learn from the PR19 experience.

We will seek to build on these lessons, and any further lessons arising from the CMA redeterminations, to help to deliver our strategy: 'Time to act, together' as we move towards the next price review and beyond.

# Executive summary

The 2019 price review (PR19) made a significant step towards improving the outcomes delivered by the water sector. Through PR19, we provided a £51 billion funding package to companies and challenged them to step up their operational performance, to invest to achieve long-term resilience and environmental sustainability and to focus investors on making returns through delivering for customers and the environment.

We laid firm foundations for PR19 in the previous price review (PR14) by reforming key parts of the methodology. We introduced a focus on outcomes that are important to customers, a total expenditure (totex) approach and separate price controls. By doing so we created an approach that better aligned investor to customer interests.

Building on the learning from PR14[1], in PR19 we challenged the sector to deliver long-term resilience, more innovation, better customer service, affordable bills and protection and enhancement of the environment. We are pleased to see that the sector is taking major steps forward in all of these areas.

While we are proud of what we have achieved, and pleased that the PR19 process is widely acknowledged as a significant improvement on PR14, we are committed to continually improving as a regulator. We are therefore seeking to learn all we can from PR19. We want to evolve both our processes and our methodology so we are more efficient and effective in achieving improvements for customers in the short and long term. This document sets out our learnings from PR19 so far.

We acknowledge there will be much more to learn as we observe company performance over the 2020-25 period. And at the time of writing, the redeterminations for four companies by the Competition and Markets Authority (CMA) are ongoing. Following the CMA process, we will consider what further lessons we should apply to future reviews, but these are outside of the scope of this document.[2]

## Delivering for customers, the environment and society through PR19

PR19 provided a £51 billion funding package that will enable water companies to deliver great customer service, improve affordability, make the sector more resilient and innovative, and support the environment. We have increased water companies' focus on customer service by linking returns more closely to service and by using comparative data to challenge under-performing companies to step up. We are already seeing some promising signs of improvements in company performance, such as the 7% reduction in leakage in 2019-20. Falling returns and the challenge we have set companies to improve their efficiency will

[1] Ofwat, 'Reflections on the price review - learning from PR14', July 2015.
[2] For more information on our response to the CMA's provisional findings, please see 'Reference of the PR19 final determinations: Overview - response to CMA provisional findings', October 2020.

improve affordability of bills. And water companies have committed to providing further support for those struggling to pay.

The package includes more expenditure on resilience than ever before, including £1 billion to reduce the impact of flooding on communities across England and Wales, and we intervened to allow an additional £469 million to address long-term drought resilience. We introduced measures to support innovation including the £200 million innovation fund, enhanced outcome delivery incentives, direct procurement for customers and funding for investigating potential future water resource schemes. And we are supporting the environment, for example by allowing £4.8 billion of expenditure for the Water Industry National Environment Programme (WINEP) in England and the National Environment Programme (NEP) in Wales.

## Creating the space to learn

We want to continue to improve and evolve our approach to future price reviews. We have therefore conducted a significant lessons learnt exercise. This involved engaging with external and internal stakeholders. Our aim was to understand what people thought worked well and what could have worked better about PR19. We spoke with UK and Welsh governments, sector regulators, CCW, water companies' regulatory teams and their CEOs. We also sought the views of wider sector stakeholders including business retailers, Customer Challenge Group (CCG) members and environmental groups.

The timing and execution of this exercise had to be substantially adapted following the impact of Covid-19. We are grateful to our stakeholders for embracing new ways of working to engage with us virtually, particularly when they were having to juggle competing priorities.

What we heard from our external engagement added to the knowledge we had collected from the lessons learnt exercises we have run internally throughout the design and delivery phases of the price review. We talked to people across all areas of Ofwat, our delivery partners and our Board to understand the impact of the price review.

## Lessons from PR19

This document explores what we have heard and our own reflections on lessons we have learnt from PR19. We summarise our key learnings here.

**PR19 was a much better process than PR14. This was achieved by Ofwat setting out a clear timetable in advance and delivering to it, while retaining flexibility to respond to emerging issues.** The PR19 plan has enabled significant changes to occur smoothly, such as the development of 15 common performance commitments, the introduction of direct procurement for customers for large schemes, a regional approach to water resources and a fairer balance of risk and return. And having that clear plan helped us to deliver effectively while remaining agile, for example by enabling us to introduce additional funding for strategic water resources. But it was still a challenging process for many people,

both in Ofwat and water companies. We will consider how we can further improve future processes.

**The initial assessment of plans (IAP) encouraged a number of companies to challenge themselves to stretch further for customers and improve efficiency.** It was also effective as a feedback mechanism to highlight where companies' plans needed to improve. We will consider how we can learn from this experience to ensure that all companies have strong incentives to produce their best business plans first time.

**PR19 was more sophisticated and covered more issues than previous reviews – but was consequently more complex.** We will consider what opportunities exist to simplify future price reviews while continuing to deliver the same or greater benefits for customers and the environment. For example, we will examine whether we could deliver some elements through our other regulatory tools outside of the price review.

**Effectively challenging companies promoted improved service and efficiency.** An important element of the price review is to challenge monopoly water companies to improve service and efficiency and to provide a framework to enable high quality decisions on new investment. At PR19, a number of companies challenged themselves to improve service and efficiency. In other cases, we used evidence from the leading performers in the sector to require companies to improve. We approved major new investment to protect the environment and deliver better service. In several cases, we protected customers' interests by intervening to increase company investment levels to improve operational resilience. There was considerable support for the approach to cost assessment including the transparent and collaborative development of cost models. The challenge to improve service was based on both historical data and evidence in company business plans. Some companies questioned whether the expected level of service improvements could be delivered without additional funding. We consider that the cost allowances were consistent with evidence of historical and forecast service improvement within base cost allowances. We will consider how we can most effectively challenge cost and service quality in future price reviews.

**Lower bills were driven by lower returns for investors.** The impact on bills is the net result of the decisions made across the price control framework. Contrary to the views of some stakeholders, we did not and do not aim for a particular bill level. We set lower shareholder returns – reflecting prevailing market conditions – and stretching but achievable cost efficiency challenges. The bill reductions are the result of a package that includes significant investment in improving resilience and protecting the environment alongside delivering improvements in outcomes over 2020-25 and beyond. In setting the overall package we took into account affordability overall and also the support available to customers who are struggling to pay and those in circumstances that make them vulnerable. These issues are increasingly important during the Covid-19 pandemic and we would expect to retain a focus on them in the next review period. We also considered bill profiles over the long term, including evidence on customer preferences for smooth bill profiles and the need for an efficient company to finance its activities. In a number of cases we intervened to reduce bills in the longer term at the expense of smaller reductions in 2020-25. Looking ahead, there may not be the same scope for falling returns to support lower bills in future.

Consequently we may face more pressure on bills and affordability from rising cost pressures to improve resilience and the environment.

**We were pleased to see a step change in the level of customer engagement at PR19, both in terms of the number of customers engaged and the approaches to engagement. There were however issues with large variances in customer valuations for the same service across companies.** The variances appear to a significant extent to have been driven by differences in the methodologies used by the different companies and their research firms. We have started considering the role which customers and customer engagement will play in future price reviews, and have published 'PR24 and beyond: Reflecting customer preferences in future price reviews – a discussion paper' outlining our initial thoughts on this and inviting views. We recognise the importance of providing an early steer on this so water companies can develop their engagement approach for the next price review alongside their continuous customer engagement.

**We consider that water companies do not yet have a full understanding of their own resilience, particularly in the longer term. There is more for us and the sector to do to build that understanding to ensure customers and the environment are sufficiently protected.** We have allowed more expenditure than ever before on resilience, and asked companies to develop resilience action plans. We intervened in companies' business plans to provide an additional £469 million to develop long term regional and national solutions to improve drought resilience, and £480 million of gated funding for Thames Water to improve services to Londoners. Some stakeholders consider that there was a missed opportunity for further resilience expenditure, but we do not consider that there was sufficient evidence to justify it; we allowed enhancement costs for resilience where it was sufficiently evidenced, and funded resilience through base costs where appropriate. We consider that we and the sector need to work together ahead of the next price review, to build our and the sector's understanding of what is needed to keep the sector resilient over the long term, and to better reflect what resilience expenditure is already funded through base costs.

**Our data and IT systems are key to the successful delivery of price reviews.** Large scale document production and complex modelling require robust and reliable systems. While our systems for PR19 worked well, we recognise that we need to continue to improve our technical capability, and we are developing our data strategy to enable us to make better use of data and run a smoother process in future.

## PR24 and beyond

Looking forward to the next price review and beyond, we will seek to build on these lessons, and any further lessons arising from the CMA redeterminations, to help to deliver our strategy: 'Time to act, together'.

We aim to work collaboratively with stakeholders to develop our approach to future price reviews. We have published our first papers to launch the development of the next price review – 'PR24 and beyond: Future challenges and opportunities for the water sector' and 'PR24 and beyond: Reflecting customer preferences in future price reviews – a discussion paper' and will engage with stakeholders on these over the coming months. We are also launching the 'Future ideas lab' – a collaborative space that we hope will be used to generate ideas and discussion on PR24 and beyond, as the 'Marketplace for ideas' did for PR19.

In spring 2021 we will launch a consultation on the development of future price reviews, looking ahead to PR24, PR29 and the long term. This will consider:

- the key challenges, ambitions and the implications of our strategy for future price reviews;
- high level design of future price reviews, including initial thinking on scope, structure and form of price controls;
- key issues for the high level approach to outcomes, cost assessment and the balance of risk and return;
- embedding longer term approaches into price reviews;
- the approach to customer engagement, taking account responses received on our discussion paper; and
- the timetable for PR24.

# Key lessons learnt

| Regulating in England and Wales |
|---|
| • It was important to consider the approach to regulation for England and Wales separately, whilst maintaining the benefits of comparative regulation across both countries. We will consider in future whether further differentiation in approach across nations would be appropriate. |
| **Key themes of PR19** |
| • Providing the right incentives did encourage water companies to challenge themselves to commit to delivering great customer service.<br>• Water companies can provide great customer service at the same time as having efficient costs, and so we should challenge water companies to do both together.<br>• Considering resilience 'in the round' enabled us to effectively assess resilience across financial, corporate and operational aspects.<br>• Many water companies need to do more to develop an integrated, systems-based approach to resilience and to present high-quality proposals for investments to maintain and enhance operational resilience.<br>• We consider that there may be some benefit in developing common frameworks and data for assessing risks to operational resilience, options to mitigate those risks and the level of resilience provided within base spending. This could enable companies to develop better quality proposals and improve the assessment of proposals in future price reviews.<br>• Focussing on innovation has raised its profile in the water sector. But providing a strong challenge using our core price review tools is equally important for spurring innovation.<br>• While some water companies are challenging themselves to bring forward innovative approaches and technologies, there remains work to do to facilitate innovation across the sector, particularly to improve collaboration between companies.<br>• We are pleased with the step up in assistance to be provided through social tariffs and other measures, but the economic impacts of Covid-19 may require companies to provide further assistance. Some companies have led the way by contributing their own money to assistance schemes.<br>• It is important to make clear that bills are a consequence of our process. At PR19, the fall in allowed returns to shareholders, driven by movements in the wider economy, has enabled falling real bills and more stable bills, taking the likely impact of inflation into account.<br>• Protecting and enhancing the natural environment is central to the role of water companies. The approach at PR19 delivers environmental improvements, but could result in greater benefits if it was more flexible. We will explore how to increase the impact for customers and the environment, eg by working with the Environment Agency, Defra and other stakeholders through the WINEP taskforce. |
| **Stakeholder engagement** |
| • The early collaboration through the 'Marketplace for ideas', workshops and working groups worked well. We should consider how to stimulate and unleash broader and deeper participation for future price reviews to enable collaborative problem solving.<br>• Our approach to company engagement, including the role of engagement managers and the query process, supported the delivery phase of the price review. We consider we had an appropriate balance of Board level and working level face to face engagement with companies, but will consider whether a different balance of engagement could be more helpful and/or practical in future.<br>• While some customer challenge groups (CCGs) were happy with the engagement with Ofwat, others would like to have had more direct engagement and clearer guidance on their roles and responsibilities. If we require CCGs or similar bodies in the future, we will aim to ensure that the guidance is useful, clear, complete and timely and our engagement is more effective.<br>• Defra and other regulators in England were pleased with the much deeper level of collaboration with them during PR19, and the high degree of transparency around Ofwat's processes. The Welsh Government would have valued closer engagement with Ofwat during the process. CCW considered they had good communication with Ofwat and appreciated the clear, early information on Ofwat's expectations.<br>• We valued engagement with wider consumer and environmental stakeholders, such as Blueprint for Water and Citizens Advice, and their input into the process. We will look to build on this in future reviews.<br>• While we engaged effectively with a range of stakeholders, there are some, such as business retailers, who we could improve engagement with in future. |

## Customer engagement

- We welcome the increased focus on customers by water companies at PR19, building on the improvements made during PR14.
- There is evidence that customers struggled to engage in the more complex and technical areas of the price control; more work is needed to improve the value and meaning of consumer research in future.
- There were large differences in customer valuations between companies across a significant number of common performance commitments. This appeared to be the result of variations in methodology and approach rather than differences between customers.
- In some areas, collaborative, consistent, national customer research may be more cost-efficient and more effective.
- Greater application of analytical techniques to existing data, eg on customer complaints and network usage, could provide further insight over and above that gained from market research.
- Customer engagement evidence was not always applied effectively to inform business plans. We should consider how to ensure companies use this evidence appropriately in future price reviews.
- CCGs played valuable roles in the price review, such as ensuring companies' research covered all areas important to consumers and informing the setting of bespoke performance commitments and incentives.
- Feedback from CCGs was that some would have valued greater access to comparative information and the ability to compare their company's business plan with other companies' business plans.
- For PR24, consideration must be given as to whether the assurance model used for customer engagement at PR19 remains fit for purpose.

## Outcomes

- Stakeholders are supportive of our outcomes regime and said that it pushed companies to go further than ever before to deliver what customers wanted.
- Common performance commitments enable comparison of performance between companies, empowering customers and challenging companies to improve service.
- The PR19 approach to common performance commitments allows for regional specific circumstances, although some companies said we set too high a bar to fully account for these.
- Bespoke performance commitments allowed companies to innovate and to cater for local circumstances, although they are harder to benchmark and increase complexity.
- PR19 included a comprehensive range of performance commitments reflecting service to customers over 2020-25 and the long term and there was general support for these metrics. But there remains a concern that companies are not sufficiently focused on the long term.
- Standardisation of the measurement of performance commitments, and compliance with these standards, is important, given the significance of these measures for customers and the increased focus on outcome delivery incentives (ODIs).
- Although PR19 allowed for additional outperformance payments, companies were concerned that incentives were skewed to the downside. Customer groups were concerned that companies should not be rewarded for 'doing the day job'. The experience of PR14 suggests that companies' assessment of expected risk and potential downside may be unduly pessimistic.
- Companies considered that the approach adopted to measuring risk was not robust enough. We consider the PR19 approach provided a valuable cross check on the overall balance of incentives.
- The early data submission for outcomes worked well, although companies wanted more time to prepare the submission and for us to provide more feedback.

## Cost assessment

- The boundaries between what is base, enhancement and growth costs, and the related but separate boundaries between costs that can be modelled and those that cannot are key to effective cost assessment.
- While we have further developed our understanding of cost drivers in PR19, there is still scope for improvement.
- We need to give early consideration to the assessment of growth costs, related data requirements and interactions with other aspects of developer services policy.
- There is scope to further improve our cost adjustment process by clarifying the evidence requirement, and considering how to implement symmetrical adjustments at PR24.
- Further clarity around our expectations of the evidence to support enhancement expenditure, particularly for proposals not driven by statutory requirements could help companies provide better evidence.

- We should consider how to gain assurance on the efficiency of forecast enhancement cost data and whether additional data sources may be used to assess forecast enhancement costs.
- It is important for us to closely engage with the water resource management plan (WRMP) process to ensure there is an appropriate and continuous level of assessment and feedback at each stage. Further embedding close working with fellow regulators and governments on WRMP prior to investments being proposed in the business plans, and ensuring that the expectations and timescales of the two assessment processes are clear and aligned is key.
- Retail costs are well suited to assessment using econometrics. We will consider how we can make our assessment even more effective through improving consistency of data reporting, exploring alternative approaches to assessing granular retail activities and investigating additional data sources for regional deprivation.
- Protecting customers requires us to challenge companies on both costs and outcomes and to ensure that these fit together in our determinations. As we hone our approach on both of these areas, the interface between them will require more attention.

### Risk and return

- Providing early clarity on the cost of capital was welcomed and worked well as a means of setting early expectations.
- Including the back in balance agenda in the price review enabled us to drive companies to act to provide further protections for customers. Going forward we should continue our active work programmes on board leadership, transparency and governance and financial resilience that are being progressed outside of the price review. We will consider how future price reviews can complement this work.

### Targeted controls

- PR19 confirmed our view that introducing structural changes, such as new price controls, is best achieved by consulting on the changes early in the development of the methodology.
- Splitting the price controls for water resources and bioresources from the network plus controls has helped to increase focus on these areas, but at the cost of some increase in complexity.
- We should actively monitor the success of initiatives to facilitate the development of markets and the market outcomes.
- Improving our approach to collaborating with other sector regulators has benefited all of the planning processes; RAPID and other initiatives including the WINEP taskforce will build on this collaborative approach.
- There is scope to improve the approach to developer services and our approach to protecting customers while facilitating the improvement of the developer services market.
- The development of direct procurement for customers (DPC) illustrates the potential to introduce competition for the provision of finance and delivery of large infrastructure projects in the water sector. We will consider how we can facilitate the potential for DPC while ensuring that the process for assessing DPC schemes is streamlined.

### Past delivery

- The PR14 reconciliation process ran smoothly because the rules, models and process were set out clearly, in particular in the 'PR14 reconciliation rulebook'.
- It may be possible and beneficial to reduce the number of reconciliation iterations for PR24 from the five carried out for PR19.
- Where possible, it would be beneficial to resolve errors and address company specific issues before business plan submissions for PR24.
- The current suite of PR19 reconciliation models is large and there could be merit in rationalising it before the next price review, noting this may have implications for allocation of risk between companies and customers.
- Companies want to engage with us so they fully understand each reconciliation before the first year of reporting in 2020-21.
- The impact of the deliverability assessment on water companies' business plans and determinations could be increased by strengthening focus and/or incentives in this area.

### Data and financial modelling

- The completion of the financial model and data tables by companies was far better than in PR14. But achieving this required leadership from Ofwat; going forward, companies should take more ownership of the quality of their data.
- Engaging early on the data tables allowed the numerous queries to be resolved and so made the tables easier to complete. But the queries process was laborious and could have been streamlined through alternative engagement approaches like workshops.
- Working early with companies to collect data for cost assessment purposes was effective and increased the consistency of data in the models.
- There is scope to improve the data collection process going forwards through better use of technology to reduce duplication of data provision – including between business plan and annual performance report (APR) submissions, better in-built checking and updating of data and improving the data submissions processes.
- Making clear the purpose of the data collected would assist in ensuring that we focus on collecting the most relevant data.
- The process of early engagement and collaboration of the development of the PR19 financial model was successful and should be built on for future price controls.

### Initial assessment of business plans (IAP)

- Customers benefited from the IAP as it provided effective incentives for water companies to submit high quality, ambitious and innovative business plans. We should consider using a similar incentive in future.
- Fast-track status was considered less beneficial to companies than the PR14 'enhanced' status, in particular around the procedural benefits. However, it also placed less risk on customers than the equivalent PR14 incentives. Publicly listed companies also appeared to respond more keenly than privately owned companies. Strengthening the incentives may increase the benefits to customers and the environment, if it incentivises better quality and more stretching business plans.
- The IAP created a strong incentive for significant-scrutiny companies – but not slow-track companies – to improve their plans beyond the IAP stage. We should consider whether a future equivalent process could create stronger incentives for more companies to improve their plans after the IAP, including through expanded use of financial penalties and clarity in advance of submission of plans as to how penalties may be abated.
- Setting a clear methodology in advance, abiding by the methodology, and providing structured feedback to companies made the IAP process effective and transparent. For any future equivalent process we should adopt a similar approach, while considering whether simplification could reduce costs for Ofwat and companies without losing benefits for customers and the environment.
- The IAP and other regulators' assessments can differ as they measure different aspects of performance, but it is important that the messaging is clear around how these different assessments come together across regulators.

### Simplification and complexity

- The issue of complexity in PR19 was a key concern for stakeholders.
- The complexity of the price review has increased in some areas to drive better outcomes for customers, the environment and society through increasing the scope of protections, increasing the accuracy and robustness of the price review, better identifying what customers want and by better allocating risk. It has also been reduced in some respects.
- Simplifying the price review could reduce the burden on Ofwat and stakeholders and enhance the ability of stakeholders to engage. But the trade-off between simplification and the impacts on customers and the environment will need to be carefully evaluated.
- There are many approaches to simplification; we should consider a range of options for simplifying future price reviews that do not sacrifice the benefits of sophistication – as simplification is not an end in itself.

### Programme management

- Providing early clarity on the timetable and delivering to the timetable enabled the price review process to work well for Ofwat and stakeholders.
- We should consider how to structure and streamline the price review process to enable effective engagement and consultation by stakeholders without creating an unduly burdensome or lengthy process.
- Our documentation was considered to be high quality and timely; however it was significant in volume. We should take steps to consolidate and focus our documentation as appropriate, to ensure that the rationale for our decisions are proportionate to the materiality of our interventions.

- Companies sought greater clarity around submission requirements; we will consider how best to provide this for PR24, taking account of the importance of company ownership of plans.
- The SharePoint secure data capture system worked well but has limited capabilities. We should investigate alternatives to Excel for data capture and analysis to improve efficiency, data assurance and automation.
- The delivery partner provided valuable expertise and flexible resourcing to meet varying demands during the delivery process.

# Contents

# 1. Introduction

In this chapter, we set out the purpose of the PR19 lessons learnt project, recap what the price review delivered and the journey to PR19, summarise how we gathered evidence for this report and set out the next steps.

The following chapters set out the key points that we have heard from stakeholders, our reflections, the key lessons we have identified and the next steps in each area.

## 1.1 The purpose of our lessons learnt review

The purpose of this 2019 price review (PR19) lessons learnt project is to ensure that we learn from the experience of delivering PR19. By reflecting on the experiences of all those involved and what we have found from our own continuous lessons learnt process we can identify opportunities for us to improve the way that we regulate, and for others to deliver more effectively for customers, the environment and society.

This report presents the findings of our PR19 lessons learnt project.

The lessons learnt project cuts to the heart of how we want to operate as a regulator. We strive to continually improve our understanding of the issues through engaging and collaborating with others across and beyond the sector. By doing so we can build our experience and expertise so that we are in the best position to do our job most effectively.

This document does not seek to review decisions made on price limits.

The lessons learnt exercise we have undertaken has given us valuable insights to take forward into the design of the 2024 price review (PR24) and future price reviews. But it cannot tell us how effective PR19 will actually be in getting companies to deliver for customers, the environment and society – such an evaluation can only be made after the end of the control period. We now have outturn data for the 2014 price review (PR14) period 2015-20 and so we are conducting a review of PR14[3], which will inform the design of PR24. We are committing now to doing an evaluation of the impact of PR19 after the publication of companies' financial data for 2020-25.

The process and outcome of the Competition and Markets Authority's (CMA's) redeterminations are outside of the scope of this review. We will reflect on and learn from the conclusions that the CMA draws when it makes its final redeterminations for the disputing companies.

[3] See Ofwat, 'PR14 review – call for input', December 2020.

Finally, we recognise that ours is not the only – or the definitive – view on PR19. We welcome the reviews of PR19 being done by the Welsh Government and CCW. We are keen to talk to any organisations who would like to share their PR19 review findings with us so that we can continuously learn from these and improve. If you would like to discuss your PR19 review please get in touch by email to PR24@ofwat.gov.uk.

## 1.2 What PR19 delivered

PR19 provided a £51 billion[4] funding package that will enable water companies to deliver great customer service, improve affordability, make the sector more resilient and innovative, and support the environment.

We have increased water companies' focus on providing **customer service** by linking returns more closely to outcomes and by using comparative data to challenge under-performing companies to step up. We are already seeing some promising signs of improvements in company performance, such as the 7% reduction in leakage in 2019-20. This improvement follows our challenge to all companies to reduce leakage by at least 15% by 2025 – to which some companies responded by going even further in their plans.

Falling returns and the challenge we have set companies to improve their efficiency will improve **affordability** of bills. And water companies have committed to providing further support for those struggling to pay.

The package includes more expenditure on **resilience** than ever before, including £1 billion to reduce the impact of flooding on communities across England and Wales. We intervened to allow an additional £469 million to address long-term drought resilience and to accelerate the development of new water infrastructure. To ensure water companies collaborate on new infrastructure we formed the water Regulators' Alliance for Progressing Infrastructure Development (RAPID). It brings together Ofwat, the Environment Agency and the Drinking Water Inspectorate (DWI), and we are working closely with Natural Resources Wales, the Welsh Government and Natural England.

We introduced measures to support **innovation** including the £200 million innovation fund, enhanced outcome delivery incentives, direct procurement for customers and funding for investigating potential future water resource schemes. We also encouraged companies to demonstrate they have a culture that supports innovation.

And we are supporting the **environment**, for example by allowing £4.8 billion of expenditure for the Water Industry National Environment Programme (WINEP) in England and the National Environment Programme (NEP) in Wales. Companies have committed to reducing pollution incidents by an average of 30% and per capita consumption by up to 13% by 2025.

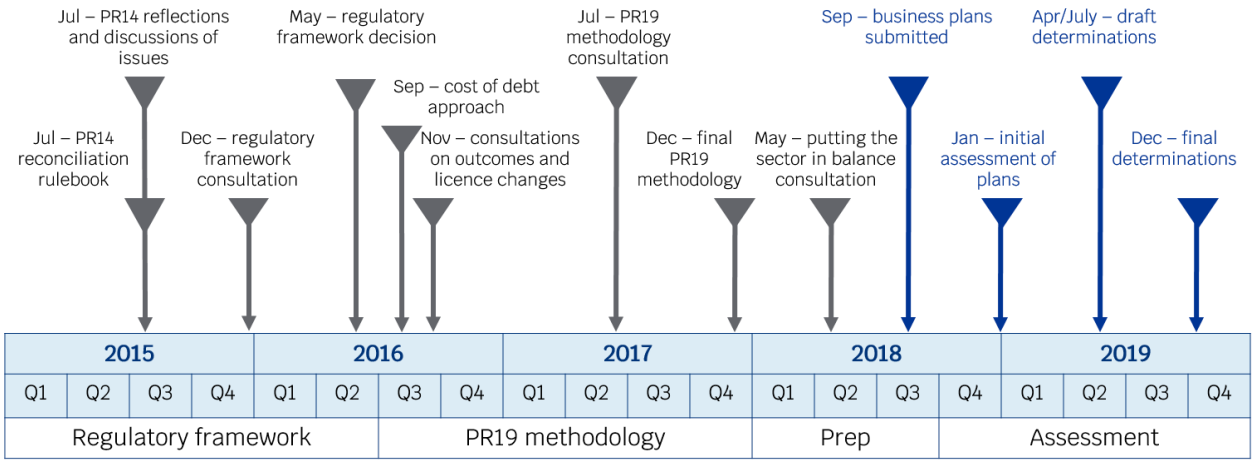
[4] All figures are in 2017-18 prices unless stated otherwise.

## 1.3 The PR19 journey

The PR19 journey began with our wider review of the regulatory framework, 'Water 2020'. In July 2015 we published a series of discussion documents on the regulatory framework under the banner 'Towards Water 2020', alongside our lessons learnt review, 'Reflections on the price review - learning from PR14'. Between 2015 and the submission of water companies' business plans on the 3 September 2018, we engaged widely with the sector on the objectives of and the methodology for the price review in England and Wales, culminating in the publication of 'Delivering Water 2020: Our final methodology for the 2019 price review'.

We started the implementation of PR19 with our initial assessment of business plans (the IAP) and published the results in January 2019. Those companies we judged had submitted the best business plans – Severn Trent Water, South West Water and United Utilities – got their draft determinations first, in April 2019. We completed the draft determinations for the remaining companies in July 2019. We considered stakeholder representations on the draft determinations and set the final determinations in December 2019. These took effect from the 1 April 2020.

### Figure 1.1 The PR19 journey




PR19 retained many of the core elements of PR14:

- a strong emphasis on customers, with company led ownership of the relationship with customers;
- a focus on companies delivering the outcomes that customers want;
- funding of total expenditure (totex) to give companies the flexibility to deliver in the best way possible for customers;
- separate price controls for business units to focus management attention on improving efficiency and delivery; and
- strong incentives for companies to produce their best plan first time.

And it evolved to introduce a number of new elements including:

- a greater focus on resilience, for example through including more than £1 billion to reduce the impact of flooding on communities across England and Wales;
- 14 common performance commitments to protect customers;
- a greater emphasis on providing support for vulnerable customers;
- competition for large projects through direct procurement for customers (DPC);
- additional price controls and greater information transparency for water resources and bioresources; and
- support for innovation, including through the new innovation fund.

## 1.4 How we gathered key learnings from PR19

To make sure we delivered the best price review we could, we embedded a process of iterative, continuous learning and improvement into the PR19 programme. We have sought to learn from our experiences across the programme in relation to three categories – policy, process and people. This started with active engagement and consultation on the approach and methodology, and continued through the use of a 'red run' in which we assessed mock company business plans to test our assessment approach in mid-2018. We ran internal lessons learnt exercises at the end of each stage of the review process to capture and disseminate lessons across the programme and Ofwat. And we have sought at each stage to learn from the feedback and representations made by stakeholders.

After the publication of the final determinations in December 2019 we broadened our lessons learnt exercise to directly involve external stakeholders. We have endeavoured to conduct this lessons learnt project in an open and transparent manner. We have engaged with a wide variety of people, including:

- water company CEOs and regulatory teams;
- Customer Challenge Group (CCG) members and chairs;
- representatives of the Department for Environment, Food and Rural Affairs (Defra) and the Welsh Government;
- CCW (formerly the Consumer Council for Water);
- the Environment Agency;
- Natural Resources Wales;
- the Drinking Water Inspectorate (DWI);
- Natural England;
- water business retailers;
- The Rivers Trust;
- Waterwise;
- water resources groups;
- Ofwat staff – both PR19 programme staff and non-programme staff;
- the Ofwat Board; and
- delivery partner members.

We have sought to elicit information through using a range of techniques, including:

- workshops – in person and virtually;
- internal and external surveys; and
- virtual meetings.

And we have sought external challenge from Martin Crouch, who also provided external challenge as a member of our PR19 Programme Board. We have also drawn on insights about PR19 from our other areas of work, including our 2020 wider stakeholder survey.

We also considered published research, such as that carried out by CCW on 'Engaging water customers for better consumer and business outcomes' and 'Lessons learned from the 2019 price review'.

We have deliberately kept the PR19 lessons learnt exercise separate from our work relating to the CMA redetermination process. There will no doubt be further lessons to draw from this, and we will reflect on this after the redeterminations are finalised.

We are grateful to everyone who has shared their reflections on PR19 with us. We appreciate how generous our stakeholders have been with their time, and how flexible and willing they have been to experiment with new ways of engaging with us during the Covid-19 pandemic.

## 1.5 What happens next

This PR19 lessons learnt report brings together what we have heard and our reflections on PR19 to inform the debate on future price reviews. But it does not seek to answer the question 'What should PR24 look like?' It is a first step towards a solution. But to answer it fully we must work with stakeholders to understand what the sector's priorities will need to be from 2025, and how PR24 can be designed to help support delivery of those priorities.

### Further engagement towards PR24

We want to work with the sector to build a collaborative engagement approach for PR24. We have learnt lessons from the engagement for PR19 – see chapter 4: Stakeholder engagement for details – and we want to go further.

To that end we will be hosting a virtual workshop for stakeholders in England and Wales on **15 December 2020**. We want to use this to discuss how we can engage best with water companies and other stakeholders on the design of PR24. We will consider what future workshops we should run, what issues could be explored through working groups and what other collaborative tools we could use for gathering ideas and input into the regulatory design of PR24.

We are also launching the 'Future ideas lab' as a successor to the 'Marketplace for ideas' as discussed in 'PR24 and beyond: Future challenges and opportunities for the water sector'. This will provide a space for stakeholders to collaborate and share ideas on the future development of PR24 and future price reviews.

We will publish our first consultation on the design of PR24 in **May 2021**.

However, we recognise that early clarity on the approach to customer engagement is particularly important for water companies as companies should be talking to their customers on an ongoing basis. We have therefore published 'PR24 and beyond: Reflecting customer preferences in future price reviews – a discussion paper', which presents our views on customer engagement at future price reviews, and will publish another document outlining our intended direction of travel in advance of or at the same time as our broader consultation on the structure of PR24 in May 2021.

## Responding to this document

We would welcome any comments on this document. Please email them to PR24@ofwat.gov.uk or post them to:

PR24 and beyond: Our reflections on lessons learnt from PR19 response
Ofwat
Centre City Tower
7 Hill Street
Birmingham B5 4UA

If you wish to discuss any aspect of this document, please contact Jacob Wood by email at Jacob.Wood@ofwat.gov.uk.

We will publish responses to this consultation on our website at www.ofwat.gov.uk, unless you indicate that you would like your response to remain unpublished. Information provided in response to this document, including personal information, may be published or disclosed in accordance with access to information legislation – primarily the Freedom of Information Act 2000 (FoIA), the General Data Protection Regulation 2016, the Data Protection Act 2018, and the Environmental Information Regulations 2004. For further information on how we process personal data please see our privacy policy.

If you would like the information that you provide to be treated as confidential, please be aware that under the FoIA there is a statutory 'Code of Practice' which deals, among other things, with obligations of confidence. In view of this, it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information, we will take full account of your explanation, but we cannot give an assurance that we can maintain confidentiality in all circumstances. An

automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on Ofwat.

# 2. Regulating in England and Wales

We set price controls in two countries – England and Wales – each with its own sets of stakeholders and under the jurisdiction of two different Governments. When setting price controls in either country we must act in the way best calculated to fulfil our duties as set out in the Water Industry Act 1991, as amended by the Water Act 2014. We must also act in accordance with 'The government's strategic priorities and objectives for Ofwat (September 2017)' from the UK Government and the Welsh Government's 'Strategic Priorities and Objectives Statement to Ofwat', collectively the 'strategic policy statements'. These set objectives for and expectations of Ofwat, and the strategic priorities Ofwat is expected to pursue.

We set out in 'UK Government priorities and our 2019 price review final determinations' and 'Welsh Government priorities and our 2019 price review final determinations'[5] how our approach to the price review aligned with the Governments' objectives for us and how our final determinations for the relevant companies support the achievement of the priorities of each Government. As discussed in these documents, we consider that the price review has delivered against the objectives and priorities of both Governments.

In England for example, we have allowed £4.6 billion for WINEP relating to water and wastewater systems to invest in protecting the natural environment. This funding will increase the quality of wastewater effluent and see improved watercourses throughout England, bringing benefits to biodiversity and habitats. Those who find their bills unaffordable will have additional support – by 2025 1.3 million customers in England should receive help through social tariffs and WaterSure, a statutory scheme that caps bills for certain customers with a water meter. And we are promoting the use of effective markets through direct procurement for customers. We are encouraging water companies to competitively tender for the financing, design, build, and operation of large projects. This can reduce the costs customers pay for the largest or most expensive new assets, by increasing competitive pressure on project and financing costs, and driving innovation through greater choice. We expect the expenditure on these schemes to be approximately £700m in the period 2020-25 and £640m in the period 2025-30. We expect further schemes in the future, including the strategic solutions, which could potentially spend over £3bn in the period 2025-35.

In Wales we have allowed £218 million of funding for the NEP, which will improve the natural environment in Wales. During the 2020-25 period, Welsh companies will invest £23 million to improve resilience in water and wastewater, including £15 million to mitigate the risk of water supply asset failures in south Wales. Those who find their bills unaffordable will have additional support – 237,000 customers in Wales should receive help through social tariffs and WaterSure Wales by 2025. And we have allowed funding to deliver the Welsh

[5] Ofwat,'Blaenoriaethau Llywodraeth Cymru a'n penderfyniadau terfynol ar gyfer adolygiad prisiau 2019' (yn Gymraeg) Rhagfyr 2019.

Government's priority to reduce the risk of lead, as set out in the 'Water Strategy for Wales' (2015). Following evidence of strong support from Hafren Dyfrdwy customers, and need for investment from Dŵr Cymru, we allow increased funding for both Welsh companies for the removal of lead pipes from the water supply network.

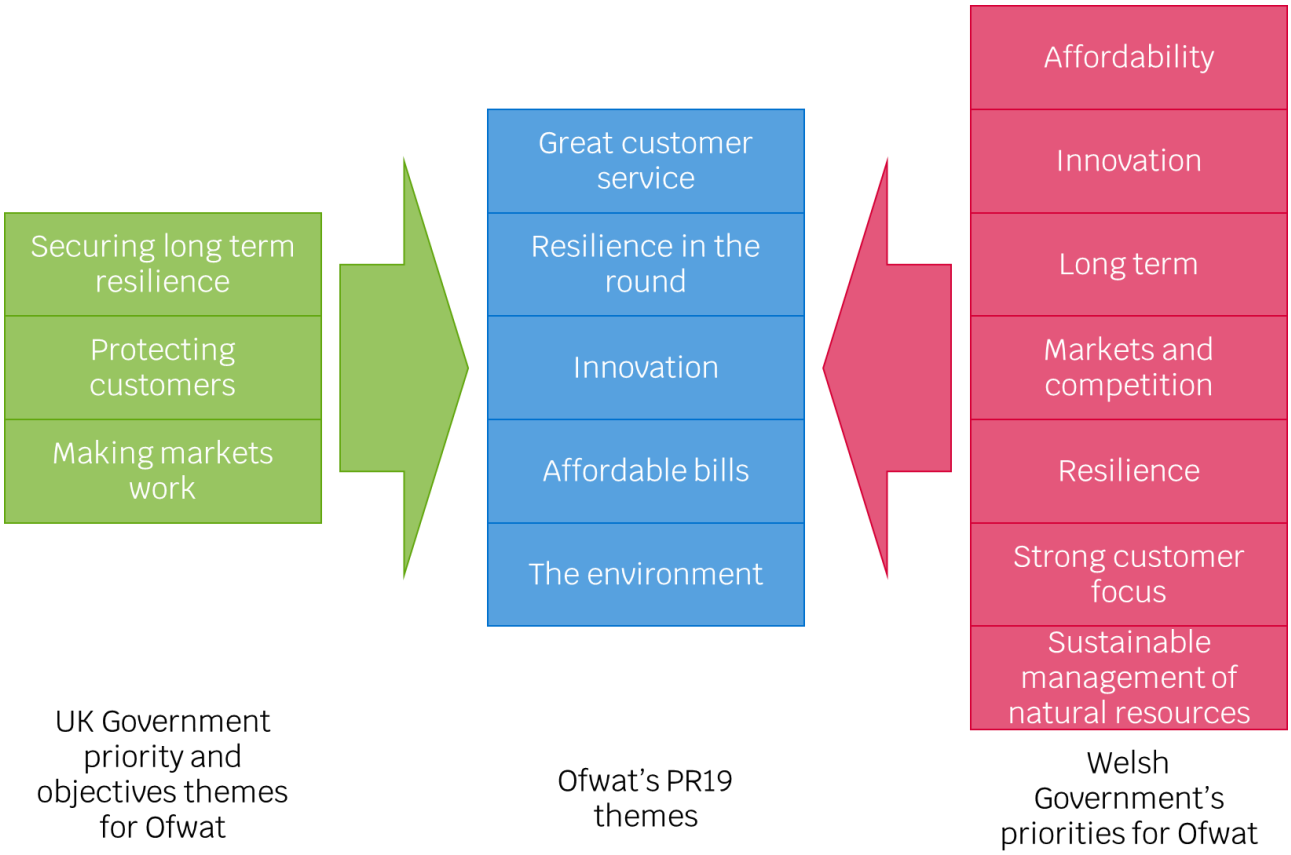



**Figure 2.1 UK Government and Welsh Government priorities for Ofwat and the PR19 themes**

As in previous price reviews, in PR19 we recognised the need to set price controls that met the needs of both countries whilst making the best use of comparable data across all of the companies we regulate. We developed our PR19 themes to focus on delivering the objectives and priorities of both governments. We considered the approach that best served the interests of customers, the environment and society was to use a common approach across England and Wales and to consider at key stages of the development of the methodology and the implementation of the assessment whether different approaches were needed for either country.

The Welsh Government fed back that it has a preference for the price review methodology to be presented as a separate document for Wales. They also questioned whether a 20 year plan with reviews every two to three years could create a greater focus on the longer term.

In Water 2020 we actively engaged with Welsh stakeholders, including through the PR19 forum. We developed our methodology with the needs of both England and Wales and with the emerging strategic priorities and objectives statements in mind, and made it clear where

the methodology differed between the two. We concluded that for the majority of issues, our policy would be most effective for customers if it was consistent across both jurisdictions. Moreover, we considered that the clearest and least complex way to present this to stakeholders was to set out one methodology, and to make it clear how it applied differently in England and Wales. For example, the methodology had a different approach to business retail and water resources in Wales as there is a greater focus on regulation instead of competition in these areas in Wales.

We are already considering how this could go further in the next price review considering the scope for country level customer engagement as discussed in 'PR24 and beyond: Reflecting customer preferences in future price reviews – a discussion paper'.

We will consider the approach to regulating in Wales further in the design of future price reviews and more generally will continue to strive to improve our capability to serve customers in Wales. To that end, in September 2020 we appointed our first Head of Wales to ensure that we grow our mutual understanding and foster a collaborative relationship with welsh stakeholders.

We will also consider how the broader context will impact on the next price review, including the issues discussed in our strategy 'Time to act, together', proposed updates to the strategic policy statements from both the UK and Welsh Governments and any changes to relevant legislation.

### Lessons learnt

- It was important to consider the approach to regulation for England and Wales separately, whilst maintaining the benefits of comparative regulation across both countries. We will consider in future whether further differentiation in approach across nations would be appropriate.

### Next steps

- We will consider what the best approach to reflecting the difference in policy and strategic priorities in England and Wales is when developing the PR24 methodology.

# 3. Key themes of PR19

We developed key themes for the price review to guide water companies in the development of their business plans. The purpose of these themes was to focus water companies on delivering a resilient long-term future for water, providing more of what matters to customers at a price they can afford and are willing to pay. The themes were:

- great customer service;
- resilience in the round;
- affordable bills;
- innovation; and
- environment.

We made the first four of these explicit in 'Delivering more of what matters in PR19 – Executive summary'. We made the implicit theme of the environment explicit later in the process, in response to emerging stakeholder views.

Throughout the PR19 process, we have maintained a focus on delivering price controls that provided the best overall package in the round for customers, the environment and wider society. We did not give any of the themes precedence over any of the others. The themes were well received by stakeholders and some commented that they increased water companies' focus on these areas.

We consider that the four themes enabled us to set out a clear ambition for the sector. This, combined with the outcomes regime, put the focus back on water companies operating their businesses really well. Some companies responded to the challenge and submitted business plans that really stretched themselves to deliver.

We consider that PR19 has been successful in challenging companies across the building blocks of the price review, including on costs and in particular on financing costs, where the lower allowed return on capital fairly compensates investors for risk and reflects the lower returns being seen across the economy. These bottom-up challenges have resulted in improved affordability with sector bills falling in real terms, alongside improvements in service.

These challenges are clearly in customers' interests, as bill reductions are being delivered as part of an overall package that includes significant investment on resilience, environmental improvements and the development of longer-term water resources, as well as delivering better outcomes in the short term. We consider it is important stakeholders understand the role of the different elements of, and their part in, the price determination process, and hence understand that bills are the end result, not the starting point of the determination process.

We recognise that it is too early to assess the success of the price review in delivering outcomes for customers, the environment and society – water companies will be working to achieve the ambitions set through the price review over the next five years and beyond. But what we can usefully do is look to learn lessons about how these themes have been borne out in companies' business plans and our resulting determinations.

We also appreciate that stakeholders have a broad range of interests and will form different views on the likely impacts of PR19 – in particular across national boundaries. We are pleased with the high level of support for the key themes of PR19 and the contribution that PR19 will make to delivering on these themes. We also note the independent research by CCW, which found that 87% of 'informed' customers found our draft determinations acceptable, with affordability the biggest driver of acceptability.[6]

In this chapter we examine the success to date in delivering against each of the key themes.

## 3.1 Great customer service

To meet the challenges facing the sector, water companies must keep pace with changing customer demands. In our final methodology, we set out that all water companies should have an in-depth understanding of customer preferences and that they should involve customers in the development and delivery of services. We expected companies to reflect customer priorities in their plans and to identify and support customers in vulnerable circumstances. Our PR19 framework sought to incentivise improvements across the sector by linking financial reward more closely with service delivery and to set stretching standards by comparing customer experience with other sectors.

We were pleased to see that many companies really challenged themselves in their business plans to deliver more for their customers. We consider that this happened partly due to a real desire from companies to 'do the right thing', and partly because the price review framework as a whole put strong incentives in place for companies to step up. The IAP was one of our key tools for achieving this, and we explore the lessons we have learnt in relation to this in chapter 12: Initial assessment of business plans.

Where water companies did not step up themselves, we challenged them to go further to deliver great customer service. And where companies' service performance was lagging behind, we challenged those companies to match best performance in the industry. Companies were able to respond to the preferences of customers in the areas they serve by proposing bespoke performance commitments. The outcomes framework, and particularly our ability to make comparative assessments in relation to the common performance commitments, enabled us to do this. Meeting these commitments will mean that customers benefit from better day-to-day services and better maintained infrastructure, including 12%

[6] DJS Research for CCW, 'PR19 draft determination research', February 2020.

fewer mains bursts and supply interruptions down by 41%. We explore the lessons learnt in relation to the outcomes framework in chapter 6: Outcomes.

We saw an improvement in customer engagement at PR19 and some high quality research. In total, a record one and a half million customers shared their views as companies developed their plans. However, the research was not of a uniformly high quality across the sector. In some cases, we did not perceive a clear line of sight from the results of customer engagement to the outcomes in the business plan, and had to intervene to make sure that plans stretched companies to deliver for customers. We explore this further in chapter 5: Customer engagement.

Overall, our final determinations set new and stretching standards which will mean customers benefit from better day-to-day services. The new customer and developer services performance commitments, C-MeX and D-MeX respectively, will encourage companies to compare themselves with the best in the UK over 2020-25, incentivising them to keep improving.

By 2025, two million more customers will be added to priority service registers (PSR). Going forward, we would like to see companies build on their good work and develop meaningful, trusted relationships with their customers and communities that shape the work they do every day.

### 3.1.1 Delivering great customer service

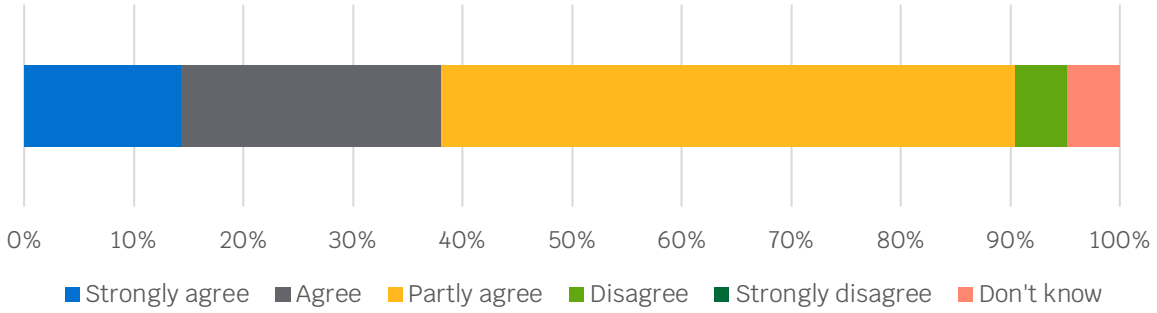



**Figure 3.1 Responses to PR19 stakeholder survey on whether the PR19 final determinations successfully delivered on the theme of great customer service**

In general, stakeholders agreed that the final determinations stretched water companies to deliver a step change in customer service, with over 90% of survey respondents agreeing that PR19 successfully delivered on the theme. One water company noted that the methodology had a great deal of focus on customers, including on customer engagement and on providing support to vulnerable customers. Another considered that the scope of customer service incentives has been extended by the introduction of the customer measure of experience (C-MeX) and the developer measure of experience (D-MeX).

Some stakeholders stated concerns about whether all of the performance targets that were set are deliverable. Several water companies have said they may not be able to meet all of their performance commitments in response to their final determinations.

We consider that while stretching, our PR19 final determinations are achievable, as we explained in our documentation at the time.[7] Indeed, evidence from PR14 demonstrates that companies can achieve upper quartile performance on both cost efficiency and service delivery.[8] We do not expect companies to be upper quartile on all outcomes, but that an efficient company, on average, should have net zero outcome delivery incentive payments.

We recognise that business plans and final determinations are the beginning of delivering great customer service. We look forward to working with the sector, monitoring, and engaging on the delivery of their performance commitments over 2020-25.

### Lessons learnt

- Providing the right incentives did encourage water companies to challenge themselves to commit to delivering great customer service.
- Water companies can provide great customer service at the same time as having efficient costs, and so we should challenge water companies to do both together.

## 3.2 Resilience in the round

Customers expect reliable water and wastewater services supplied by infrastructure that can avoid, cope with and recover from, disruption. We set out at PR19 that water companies needed to secure financial, corporate and operational resilience: to be 'resilient in the round'. We expected companies to take a system-wide approach to the risks they face, to take account of our seven principles for resilience planning[9] and to be able to demonstrate that they had the right information, systems, processes, governance and capabilities. We also set out that companies needed to step up on a number of resilience measures that are important to customers.

We asked companies to demonstrate their approach to securing resilience in the round in their business plans. Overall, we had significant concerns around companies' ability to demonstrate that they had a suitable framework in place. In the IAP, 15 of the 17 companies provided evidence that fell short or significantly short of high quality in this area. In particular, we found that the business plans lacked systems-based approaches. Most plans lacked a clear line of sight between the risks to resilience identified by the company, the

[7] Ofwat, 'PR19 final determinations: Overall stretch on costs, outcomes and allowed return on capital policy appendix', December 2019, page 19.
[8] Ofwat, 'Reference of the PR19 final determinations - Cross-cutting issues', March 2020, page 20.
[9] Ofwat, 'Delivering Water 2020: Our final methodology for the 2019 price review', December 2017, pages 79-80.

proposed mitigations to tackle these risks, and how these mitigation plans were reflected in the form of performance commitments.

Following our assessment and feedback, many companies took action to revise their resilience frameworks in order to improve their approach. We also required companies to develop specific action plans to demonstrate that tangible measures were in place for implementation of their resilience frameworks. As discussed in 'PR19 final determinations: Securing long term resilience', many companies continued to fall short of our expectations in some areas. Going forward, we consider there are benefits in exploring further how the sector could develop a more standardised understanding of risks to resilience, and the appropriate framework for identifying the best mitigation of these risks.

Resilience was central to PR19. Our final determinations included £13 billion of enhancement investment above and beyond what companies need to do as part of their day-to-day operations, including almost £4 billion for network resilience. At the same time, we strengthened the incentives for companies to increase operational resilience through their performance commitments on asset health. We also set stretching commitments on key indicators of day-to-day resilience, such as leakage, supply interruptions and sewer flooding.

We are pleased that many companies developed well-evidenced proposals for improving resilience. However, we note that some companies required several iterations to make proposals and in some cases were still unable to provide robust analysis of risks and options to mitigate risk. Two common and persistent shortcomings were the lack of quantitative analysis of the impact on risk from the proposed interventions and a lack of clarity about the level of resilience funded within base cost allowances. We had to step in to provide £469 million of additional funding to explore long-term strategic water resource options where companies had not developed these sufficiently in their Water Resource Management Plans (WRMPs). We also provided £480 million of gated resilience funding for Thames Water where the company failed to robustly make the case for funding. We explore resilience funding further in chapter 7: Cost assessment.

Financial resilience was also considered as a key part of resilience in PR19. Our determinations were financeable on the basis of the notional capital structure. However, each company is responsible for ensuring it delivers its obligations and commitments to customers in the context of its choice of capital and financing structure. At PR19 we prescribed a number of downside scenarios for companies to consider in assessing their financial resilience. Our review of each company's assessment enabled us to identify those companies that have more work to do to maintain long-term financial resilience. All companies committed to meet our expectation that their assessment of financial resilience in the long term viability statements in their annual performance reports (APRs) should extend beyond the 2020-25 period.

### 3.2.1 Delivering resilience in the round

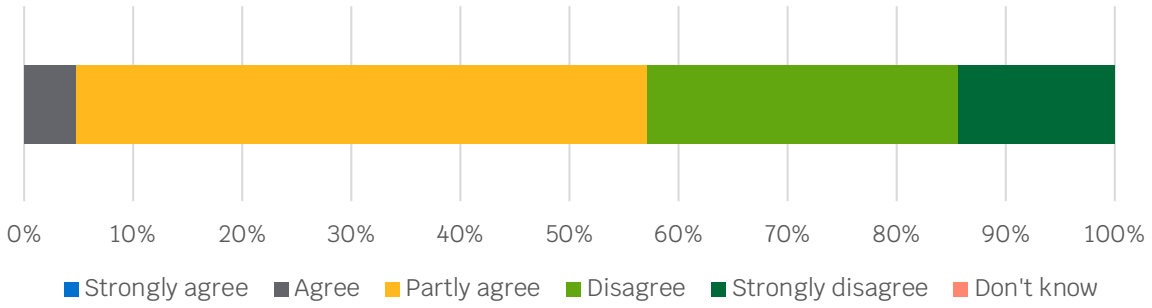



**Figure 3.2 Responses to PR19 stakeholder survey on whether the PR19 final determinations successfully delivered on the theme of resilience in the round**

The majority of stakeholders (58%) considered that PR19 successfully delivered on resilience in the round, although views were more mixed in this area than on other themes. Stakeholders welcomed the increased focus on resilience and considered that companies placed greater emphasis on building their understanding as a result. Stakeholders considered that financial and corporate resilience were well assessed and incentivised through the process. Most of the challenges we have heard to our approach are around operational resilience.

We have been given feedback that some aspects of our approach to resilience have worked well, but that there is scope for improvement in other areas. Some stakeholders were uncertain that the final determinations included sufficient funding for resilience. This is in response to our efficiency challenges and the evidence companies presented suggesting customers supported further resilience expenditure.

We consider that the final determinations provide sufficient funding for all companies to deliver resilient services to their customers. We have challenged the scope of relatively few resilience schemes – our challenge was primarily around the efficiency of the schemes proposed. Where the need for and customer support for resilience expenditure was robustly demonstrated, we allowed that investment – but companies did not provide sufficient evidence in all cases. We explore this further in chapter 5: Customer engagement.

We note that as well as challenging cost efficiency, we have also intervened to increase funding, including £469 million to improve long term drought resilience, around £180 million of gated funding to investigate risks to resilience and mitigate risks to water supplies in North East London and £300 million of gated funding to invest in improving the resilience of the London water network. This demonstrates our willingness to fund companies to invest in improving resilience. We have carefully considered both the risks to customers as well as cost efficiency as part of our assessment.

One water company also considered that our approach drives companies towards expensive systems and commissioning consultants' reports rather than a proportionate approach depending on current levels of resilience and company size. Another stated that it considers the regulatory framework to be biased towards short-term goals rather than long-term resilience. The funds to support the development of strategic water resources were recognised as a boost to longer-term resilience by other respondents.

Our policy was developed taking account of the better regulation principles, set out in the 'Better regulation framework: guidance', including proportionality. We consider that our use of a consistent framework for assessing resilience across companies was appropriate, but will reflect further on how to better reflect proportionality in terms of the impact on customers in relation to both costs and risks. It is important that customers are not exposed to additional risks or differences in service due to the size of their water company.

### Lessons learnt

- Considering resilience 'in the round' enabled us to effectively assess resilience across financial, corporate and operational aspects.
- Many water companies need to do more to develop an integrated, systems-based approach to resilience and to present high-quality proposals for investments to maintain and enhance operational resilience.
- We consider that there may be some benefit in developing common frameworks and data for assessing risks to operational resilience, options to mitigate those risks and the level of resilience provided within base spending. This could enable companies to develop better quality proposals and improve the assessment of proposals in future price reviews.

## 3.3 Innovation

We put a greater focus on innovation at PR19 than at any of our previous price reviews. In 'Delivering Water 2020: Our final methodology for the 2019 price review', we set out that innovation must be at the core of every company to deliver all of the themes of PR19 and that we expected companies to look beyond their boundaries in addressing the challenges they face.

We introduced a number of new features of the price control to spur innovation in the sector. There are a number of newly-established markets in the water sector, such as direct procurement for customers (DPC) for large infrastructure projects, the water resource and bioresource markets and markets for eco-services. These all offer companies scope for greater innovation and more effective co-operation with third parties to deliver for customers. We also introduced enhanced outcome delivery incentives to encourage companies to improve performance beyond the best level currently achieved by any company

and, over the long term, deliver benefits for all customers. These incentives further improved our totex-outcomes framework, first used at PR14, which already gives companies the freedom to innovate and explore to find the most cost-effective way of delivering.

Through the IAP, we offered financial, procedural and reputational rewards to companies who put forward high-quality, innovative business plans, and we were encouraged to see some companies demonstrate real ambition in this space. We also specifically assessed the extent to which companies demonstrated that they had the right culture for innovation. Overall, we found mixed evidence that companies were building a culture and capability to deliver future solutions. In particular, there was limited evidence of collaboration across companies to address common goals, and we would have liked to have seen more evidence of how companies will innovate to meet future challenges.

While we saw some good pockets of innovation at PR19, we did not see sufficient evidence of the cultural shift we think is needed to drive truly transformational innovation and address key challenges at the sector level. At final determinations, therefore, we made £200 million available through an innovation fund to drive innovation that companies would not otherwise explore or invest in. Further to a package of stretching outcomes, seven companies have the chance to earn enhanced outcome delivery incentives on certain performance commitments if they successfully innovate and share that innovation with the rest of the sector.

### 3.3.1 Delivering innovation

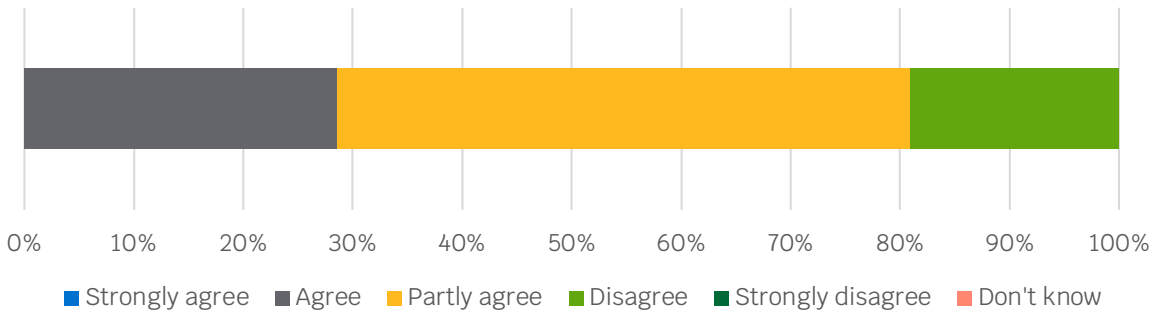



**Figure 3.3 Responses to PR19 stakeholder survey on whether the PR19 final determinations successfully delivered on the theme of innovation**

Overall, over 80% of stakeholders considered that PR19 delivered on innovation. Stakeholders considered that Ofwat encouraged innovation in a number of ways at PR19, including through the assessment of innovation culture, the introduction of enhanced outcome delivery incentives, DPC and the innovation competition. There were mixed views on whether the overall framework incentivises companies to innovate. Some considered that the level of stretch on costs and outcomes will make innovation necessary, while others considered that our efficiency challenge will force companies to focus on shorter-term solutions.

We consider that the focus we have placed on innovation and the changes we made to the price control have been successful in increasing companies' appetite for innovation. While it is difficult – and indeed too early – to assess the success of our approach, we consider that we have managed to raise the importance of innovation in the industry. Outside of the price control process, we will continue to encourage companies to adopt innovative approaches and technologies, as set out in our strategy, 'Time to act, together'.

A number of water companies expressed their support for the £200 million innovation fund. Some doubted whether the competitive nature of the fund would foster collaboration, while small companies expressed concerns that the process created barriers to those with limited resources. Others would have preferred the fund to have been introduced at the beginning of the PR19 process.

We used the flexibility built into the PR19 process to introduce the innovation competition, as our IAP revealed that companies needed to do more to foster an effective innovation culture across the sector to meet future challenges. We consulted in 'Innovation funding and competition: Further consultation on design and implementation', in May 2020. We published our decisions following the consultation in 'Innovation funding and competition: decision on design and implementation' in August 2020. We outlined that, to obtain funding, companies will need to demonstrate they are putting forward proposals that will have an impact on at least one of our five innovation themes and that go beyond business as usual activities in a number of ways. This should include how companies are working in new ways with each other and third parties and demonstrate their openness to transparently sharing insights with the whole sector. The approach we are adopting is to pilot a mixture of financial incentives, different competition formats and a greater openness to innovation related risks. We aim to attract a wide range of different projects of varying size and encourage the adoption of a more innovative culture across the sector. For more information, see our webpage on water innovation competitions.

### Lessons learnt

- Focussing on innovation has raised its profile in the water sector. But providing a strong challenge using our core price review tools is equally important for spurring innovation.
- While some water companies are challenging themselves to bring forward innovative approaches and technologies, there remains work to do to facilitate innovation across the sector, particularly to improve collaboration between companies.

## 3.4 Affordable bills

Water and wastewater services must be affordable to customers. This means affordable overall, in the long term and for those struggling, or at risk of struggling, to pay. Research

suggests that almost 3 million customers in England and Wales do not consider their water charges affordable.[10]

We asked companies to submit business plans that considered affordability and value for money for customers in 2020-25 and beyond. We were pleased to see a step change in performance on affordability compared to previous price reviews, with most companies stretching their commitment to future affordability. However, the plans did not fully demonstrate that bills will be affordable beyond 2025, and companies have more work to do to understand long-term affordability issues.

All companies engaged their customers on the benefits of social tariffs and have obtained sufficient support to increase the amount they levy to give discounted bills to those who cannot afford to pay. By 2025, over 1.4 million customers in England and Wales should receive help through social tariffs and WaterSure, a statutory scheme that caps bills for certain customers with a water meter. Four companies have pledged to partly self-fund their social tariff schemes using shareholder money.

As a result of our 'PR19 final determinations', average water bills will fall by 12% before inflation. Customer bills are an outcome of our methodology, rather than a target we aim to meet. At PR19, this downward movement was largely driven by the lower allowed return on capital, based on our analysis of market data up to the end of September 2019. At the same time, our efficiency challenge, based on detailed econometric and engineering analysis, ensured that customers will not pay any more than they should. We set a high bar of efficiency for companies, by considering wider evidence of efficiency gains and frontier shift, to drive a step change in efficiency across the sector.

### 3.4.1 Delivering affordable bills

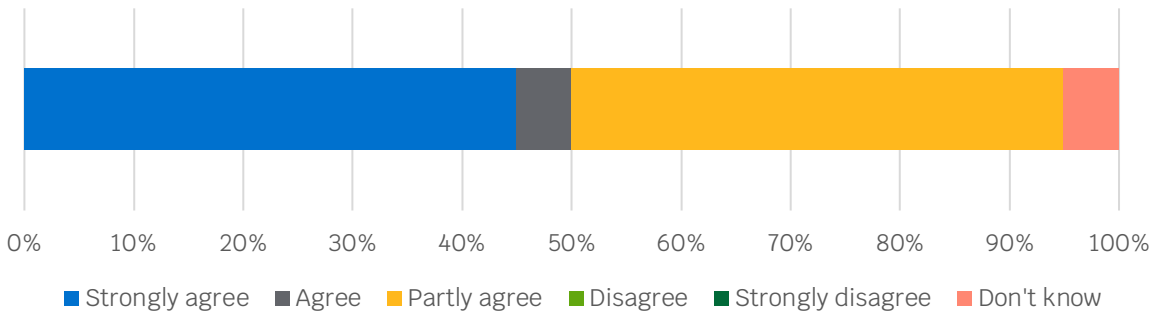



**Figure 3.4 Responses to PR19 stakeholder survey on whether the PR19 final determinations successfully delivered on the theme of affordable bills**

All respondents to our stakeholder survey who expressed a view agreed that the final determination delivered on the theme of affordable bills. Stakeholders recognised that the

[10] See CCW, 'Water for all: Affordability and vulnerability in the water sector (2017-18)', October 2018, page 5.

final determinations included a number of measures to address affordability. These included social tariffs for those struggling to pay and incentives to create a fairer distribution of charges across customers, for example through incentives on improving information on voids and gap sites. However, CCW noted that the sector could still go further, as not all customers who need support will receive it. Citizens Advice welcomed the emphasis we placed on affordability, which may become more important as the financial implications of Covid-19 become clearer.

We consider that the steps towards improving affordability for all, including those struggling to pay, at PR19 stand the sector in good stead. The steps that have been taken in PR19 can be built on in future as water companies develop their understanding of their customers and their needs.

Several water companies note that it is important to consider the impact of bill reductions in 2020-25 on longer term bill profiles, particularly given current evidence on customers' preferences for bill stability stable over volatile bills.

When considering bill profiles, we have also considered the longer term. For a number of companies, revenue was brought forward from future periods into 2020-25, increasing bills in 2020-25 and lowering bills in the longer term. Given the reduction in real bills, this should help smooth bills over the longer term.

### Lessons learnt

- We are pleased with the step up in assistance to be provided through social tariffs and other measures, but the economic impacts of Covid-19 may require companies to provide further assistance. Some companies have led the way by contributing their own money to assistance schemes.
- It is important to make clear that bills are a consequence of our process. At PR19, the fall in allowed returns to shareholders, driven by movements in the wider economy, has enabled falling real bills and more stable bills, taking the likely impact of inflation into account.

## 3.5 Environment

The water sector, and society as a whole, depends crucially on a healthy natural environment. After setting out the other four themes in our final methodology, we made the implicit theme of the environment explicit later in the process, in response to emerging stakeholder views. However, from the outset our methodology made it clear that our ambition for the environment was higher than ever. We expected companies to consider the wider costs and benefits of their plans and to engage with customers on environmental outcomes and investment.

We designed PR19 to help and incentivise water companies to deliver the environmental improvements that customers want, as well as their statutory and licence obligations. For example, we gave all companies common performance commitments on the environment, such as for per capita consumption, pollution incidents and treatment works compliance. In addition, all companies were required to propose bespoke performance commitments on the environment alongside a commitment to reduce abstraction at environmentally sensitive sites.

Recognising that sector progress on leakage had stalled in recent years, in 2017 we challenged all companies to reduce leakage by 15% over 2020-25.[11] It is heartening to see the sector responding to this challenge, and we note the encouraging 7% leakage reduction in 2019-20, which indicates the sector's ability to improve. However, it raises the question of why, if the sector can deliver these improvements, it has not challenged itself to deliver them before. We will need to consider whether Ofwat should provide similar challenges in future price reviews. And we should consider whether focusing on a smaller or larger number of issues would provide the best outcomes for customers, the environment and wider society.

We also note that the development of long-term targets for the sector provides a framework for companies to challenge themselves in future price reviews. Our strategy 'Time to act, together' recognises the importance of jointly developing long-term targets for the sector. At a Ministerial roundtable in September 2020, Environment Minister Rebecca Pow acknowledged the importance of target-setting for the sector, noting that the upcoming Environment Bill, if enacted as currently drafted, will require the government to set binding targets in relation to four priority areas for the environment in England, including water. Such long-term targets could help to provide increased clarity to the industry in England on strategic priorities, driving longer term resilience and broader improvements for water customers, as well as providing context for future price review priorities. We will continue to work closely with the Welsh Government and Natural Resources Wales to develop and reflect shared objectives in our approach to regulation.

Our final determinations included £4.8 billion to deliver the NEP and the WINEP. These programmes will help tackle some of the biggest challenges facing the water environment. Companies will take on stretching but achievable commitments to make a real difference for the environment, including reducing pollution incidents by 30% and per capita consumption by up to 13%.

At PR19 we assessed how far companies used an integrated approach to resilience, including using environmental valuation techniques, conducting an ongoing assessment of environmental risks, and taking advantage of natural processes where appropriate. We found that, while most companies considered a wide range of options and mitigations in their plans, fewer companies considered nature-based solutions beyond typical catchment management schemes. Overall, we are pleased with the expansion of nature-based schemes in PR19, but would like to see a further step up in these schemes given the broad benefits

[11] See Ofwat, 'Delivering Water 2020: Our final methodology for the 2019 price review', December 2017.

they can provide. We will continue to encourage nature-based schemes and work with other regulators to address any barriers to their use. We consider, for example, that there could be greater scope to include nature-based schemes within the NEP in Wales and the WINEP in England.

### 3.5.1 Delivering for the environment

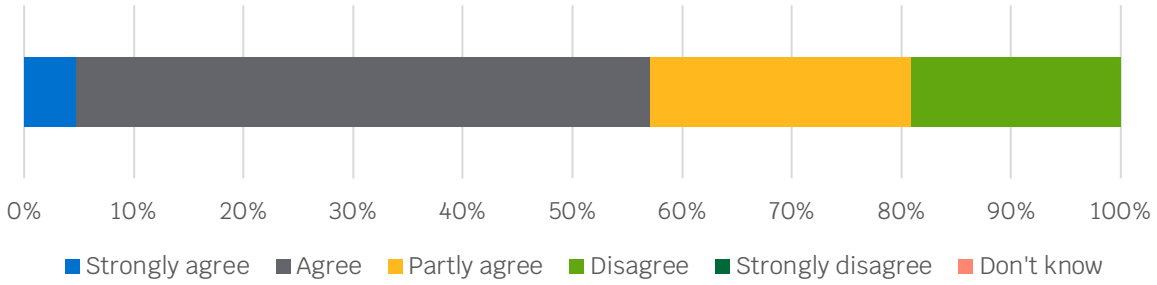



**Figure 3.5 Responses to PR19 stakeholder survey on whether the PR19 final determinations successfully delivered on the theme of environment**

Over 80% of stakeholders agreed that PR19 successfully delivered against the theme of the environment. Stakeholders welcomed the strategic level ambition and challenge from Ofwat on environmental issues, water efficiency, and investing in more long-term sustainable solutions, and considered that business plans reflected this. There was general agreement that the outcomes framework supports this ambition through environmental performance commitments.

Most stakeholders considered that we assessed well-evidenced cases for funding reasonably, but some commentators raised concerns that environmental improvement has been constrained by our challenge on costs.

We consider that our efficiency challenge was appropriate. The PR19 WINEP and NEP is significantly larger than the WINEP at PR14. We have not challenged the scope of any WINEP or NEP proposals because water companies have a legal obligation to deliver this investment. Rather, we have challenged the efficiency of the proposed expenditure to ensure that customers do not pay over the odds. Overall, 50% of companies received all, or almost all, of the funding they requested. This is discussed further in chapter 7: Cost assessment.

Focus on the environment will increase as we move towards PR24. It is encouraging to see water companies taking greater ownership of environmental issues and challenging themselves to go further, for example through the Water UK commitment to achieve net zero operational carbon emissions by 2030. This target will require a concerted effort across the sector to be achieved.

We consider that it is important to continue to build on the strategic focus on the environment of PR19 and our strategy, where we commit to making the environment integral to all that we do. We aim to achieve this by working collaboratively with others. For example we are working with the Environment Agency, Defra and other stakeholders through the WINEP taskforce to make the next WINEP work even better for customers and the environment.

## Lessons learnt

- Protecting and enhancing the natural environment is central to the role of water companies. The approach at PR19 delivers environmental improvements, but could result in greater benefits if it was more flexible. We will explore how to increase the impact for customers and the environment, eg by working with the Environment Agency, Defra and other stakeholders through the WINEP taskforce.

## Next steps

- We will consider how we can build on the lessons learnt from considering our delivery against the PR19 themes, and the broader context, including Ofwat's 'Time to act, together' strategy to set the overall policy framework for PR24.

# 4. Stakeholder engagement

In this chapter we consider what we have learnt about our approach to engaging with external stakeholders including water companies, CCGs, Defra, the Welsh government, the Environment Agency, Natural Resources Wales, the DWI, CCW, environmental groups and water resources groups.

Customers are of course also key stakeholders for us. In PR19, as in PR14 we put the emphasis on companies owning the relationship with their customers. The effectiveness of companies' engagement with their customers is discussed in chapter 5: Customer engagement. Because of this emphasis we did not engage directly with customers ourselves. Instead we empowered CCGs to challenge companies on the quality and application of their customer engagement, and listened to the views of customer representation organisations such as CCW who, for example, carried out acceptability testing with customers that showed high levels of acceptability for the draft determinations.[12] Going forward, our role in this space may change; this is explored in 'PR24 and beyond: Reflecting customer preferences in future price reviews – a discussion paper'.

## 4.1 Engagement on price review design (2015-18)

We started engaging with a broad range of stakeholders on the design of PR19 shortly after we published the PR14 final determinations, firstly through our lessons learnt exercise, 'Reflections on the price review - learning from PR14', and subsequently through the Water 2020 project. Our Water 2020 consultations were well received, as discussed in the documentation section of chapter 14: Programme management. Water companies identified two further areas of engagement on price control design as being particularly successful: the 'Marketplace for ideas' and our cost assessment and bioresources working groups.

### 4.1.1 Marketplace for ideas

The 'Marketplace for ideas' was a website promoted by Ofwat and hosted by Water UK that acted as a platform for participants to share ideas through think-pieces. Its objective was 'to enable water companies to contribute their expertise, perspectives and research to inform the debate on the future of water'. It focussed on economic regulation, and price review design in particular. Water companies and other stakeholders published 72 papers through it, which also helped facilitate a number of useful conversations on the development of PR19's design. Companies welcomed this early collaboration between Ofwat and the sector and said they would like PR24 to repeat it. However, some companies considered that more of the ideas put forward could have been incorporated into PR19.

[12] CCW 'PR19 draft determination research', February 2020.

We thank companies for their substantial engagement and participation in the 'Marketplace for ideas'. We are pleased that a number of the insights and thinking in these papers were reflected in the PR19 methodology, particularly where companies were able to take a broader view and consider longer term customer interests. However, with the 'let a thousand flowers bloom' mentality, it is not surprising that it was not appropriate or even possible to implement all of the proposed ideas. As discussed in 'PR24 and beyond: Future challenges and opportunities for the water sector' we are launching the 'Future ideas lab' as a successor to the 'Marketplace for ideas'. Our aim is for this to enable stakeholders to share and collaborate on ideas to further the development of the regulatory framework for PR24 and beyond.

### 4.1.2 Workshops and working groups

Companies welcomed the collaborative approach taken in the policy design workshops and working groups. They said the cost assessment and bioresources workshops worked particularly well. However, a few companies could not see a clear line of sight from the workshop discussions to Ofwat's decisions. Some companies also considered that the C-Mex working groups did not work as well, as they moved away from a collaborative approach. Companies are in favour of continuing the collaborative workshop approach for PR24, and extending the scope to include the financial model, data tables, customer research and outcomes. One company noted that virtual collaboration tools should make future workshops less resource intensive.

We valued companies' input in the workshops and consider they helped inform our decisions – but it is important that the final decisions are made by us so that we can achieve the right balance between all of our duties. We consider we explained our decisions well – and we received feedback from some companies that they agree. We needed to strike a balance between transparency and the volume of documentation, which was already considered large. We will consider how best to use policy workshops to aid the development of PR24, including considering what made the cost assessment and bioresources workshops most effective and where we can extend them to more policy areas. We will explore using virtual collaboration tools where helpful. We will shortly be launching our first PR24 working group on outcomes.

#### Lessons learnt

- The early collaboration through the 'Marketplace for ideas', workshops and working groups worked well. We should consider how to stimulate and unleash broader and deeper participation for future price reviews to enable collaborative problem solving.

## 4.2 Engagement during the price review (2018-19)

### 4.2.1 Water company working level engagement

The price review was a comprehensive process as we needed to assess 17 separate company business plans in three specific stages of submission and assessment (the IAP, draft and final determinations), with detailed feedback provided at each stage. PR19 included more stages than commonly used by other regulators (which are usually limited to draft and final determinations), with a far greater level of feedback provided to companies.

The detail in this feedback has been broadly welcomed across the sector.

We took an even-handed but flexible approach to engagement, aiming to maintain an open dialogue with all companies. As in any decision making process, the level of engagement must draw down over time so the decision can be made.

During the PR19 process, companies had a wide range of opportunities to engage with Ofwat on PR19 and other issues. These included:

- two formal meetings with Ofwat Board members (including non-executive members), to present their September 2018 business plan and to present and discuss their August 2019 representation on the draft determination;
- regular contact with our dedicated PR19 company engagement team, including by calls and emails; and
- an extensive two-way query process where, as well as Ofwat being able to ask companies queries, companies were able to ask Ofwat for a response to queries about its assessment. This included a query process about our business plan reporting requirements before companies submitted their business plans in September 2018 and numerous webinars where we explained our approach and decisions.

In addition we met with individual companies on a number of topics where we considered it appropriate to do so.

Most companies thought that communications around the price review process and timeline, including the guidance we issued, were clear and comprehensive. They said that, on the whole, they knew what was expected of them and when. They also said that we responded quickly to their questions on the process.

We also consider this was effective as companies provided what was required at the right times. We consider this is a result of the clear timeline as discussed in chapter 14: Programme management.

Companies did however experience some frustration from their access to technical and policy experts in Ofwat during the review process being limited. We primarily channelled engagement with companies during the price review to two routes – the query process and engagement managers, which are discussed further below. Most companies said they understood the need for these formal and transparent engagement approach. But companies considered that in addition to these processes they needed to have more direct engagement with technical and policy teams. The engagement managers were not technical experts so had to act as a go-between on many issues, and the query process sometimes resulted in 'query ping pong' where issues would go back and forth several times before reaching a conclusion.

We consider that the issue of how many conversations with Ofwat policy teams companies can have during the price review is a tricky one. First and foremost, we strove to provide equal access across all 17 companies. The relatively small number of Ofwat people who could have these discussions created a natural limit on how many issues we could reasonably discuss with each company. Given the legal nature of the decisions process, we consider it important for us to have a clear audit trail of the decisions being made, which is simpler and more transparent if issues are addressed through a written query process.[13] But clearly there were occasions where a conversation was necessary to close down issues, and we did this where we considered it helpful to do so. For the next price review, we will consider when it is best to facilitate conversations on particular policy issues.

In relation to the issue of access to Ofwat policy experts, some companies raised concerns that fast-track companies had received preferential treatment and had additional engagement with us at the time of the fast track decision. While we did have additional conversations with the fast-track companies earlier in the price review, these were to make sure that the companies understood what they were signing up to by being fast tracked. Other than this, we consider that the slow-track companies were treated equivalently in terms of engagement. Indeed, the fast-track companies commented that they considered they got less engagement later in the process during the slow-track and significant-scrutiny draft determinations process.

We were explicit in saying that we would engage more with significant-scrutiny companies as we considered that in order for us to protect customers and the environment we needed to work with these companies to help them improve the quality of their plans.

## Engagement managers

In general, the central point of contact for each company at Ofwat during the price review was their engagement manager. Most companies said that the dedicated, consistent engagement managers worked well and they maintained constructive relationships.

[13] Even with advances in video conferencing and recording, discussions risk remaining vague in their conclusions in a way that is less common with written communications.

From Ofwat's perspective the engagement manager system also worked well as they ensured we always had a clear line of communication open to companies.

## Queries processes

Our second main engagement channel during the price review process was the written query processes. Most companies thought that these were well organised, transparent and, on the whole, worked smoothly. There were nevertheless some issues with it. Many companies, especially the smaller ones, found the two day deadline for responding to queries challenging. They said this was particularly the case where the queries were substantial or very technical, and that it put their teams under significant pressure. They did however say that Ofwat was normally happy to agree an extension to the deadline when this was requested. Some companies also said that while companies were held to a two day response time, Ofwat was often much slower to respond, which caused problems for the companies.

We consider that the queries process worked well, and while it may at times have felt cumbersome, it successfully ensured that companies were treated consistently and that we had full records of the issues involved. We appreciate that receiving slower responses from Ofwat must have been frustrating. In future we will consider how we can manage our responses to queries more efficiently.

We also ran webinars after publication of decision documents to help create a shared understanding across companies of decisions. These were met with mixed reviews; some companies considered these helpful. Others thought that they added little value as they repeated the information in the published decision documents, and were too soon after publication for companies to use them to raise questions.

We will consider in future how to make webinars or the equivalent more useful, by tailoring content, or allowing more time for companies to consider questions to raise. However, we would not expect them to contain more information than the other published material; if the material was important we would seek to publish it.

A number of companies suggested that Ofwat could make better use of the years before the price review submission to build up a deeper understanding of companies, including by visiting companies. They said this should reduce the number of queries for companies during the price review and also build up the trust between Ofwat and companies.

Continuing to build our understanding of the sector is an important part of our strategy, and if it were not for the Covid-19 pandemic, we would have no doubt spent much of 2020 out and about visiting companies. However, we are increasingly making use of virtual collaboration tools and so hope to be able to build that understanding in new ways.

### 4.2.2 Executive level engagement

Companies generally welcomed the opportunity to engage directly with Ofwat Board members. Opinion was mixed on whether more engagement would have been helpful. Some companies thought there was sufficient engagement at the Board level, whilst others would have liked more, and/or for it to start earlier in the process. Some companies said that they would have liked greater and more frequent access to the senior director for PR19 to help resolve key issues more quickly.

Our Board, particularly the non-executive directors (NEDs), also appreciated the opportunity to hear directly from the companies. While some members of the Ofwat board could see some value in having more Board level engagement, we are also conscious of the significant additional burden of further engagement. We considered that the level of Board engagement gave us a helpful understanding of companies while maintaining a reasonable balance with the practicalities of the price review. Similarly, the senior director for PR19 engaged with companies on a number of key issues where helpful to do so, and we consider it would have been impractical for them to have done more engagement. We will consider for future price reviews whether more or less Board and Executive level engagement would be helpful and/or practical.

### 4.2.3 Engagement with CCGs

Many CCGs chairs thought that Ofwat's engagement with them was good, and demonstrated real learning from PR14. Having a named point of contact at Ofwat and the meetings with Ofwat were considered useful. Some CCG chairs said that they would have liked more direct engagement with Ofwat, earlier engagement, and for Ofwat to have attended key CCG meetings. Some CCG chairs said that Ofwat could have encouraged more collaboration and information sharing between CCGs.

Some CCG chairs and members said that they would have liked greater clarity on the role and expectations of the CCGs and customer research. Most CCG chairs found the 'Aide Memoire for Customer Challenge Groups' useful, although one company considered it needed further explanation; some companies considered it should have been published earlier. Some CCG chairs also said they would have liked more opportunity for two-way feedback between Ofwat and CCGs during the process to help improve engagement.

CCW reflected that the challenge logs – which were intended to be the means for CCGs to communicate with Ofwat where they had challenged companies – were helpful. But some CCW members of CCGs had difficulty getting CCGs to complete the log as some CCGs wanted to be more of a critical-friend to companies.

We reflect that the engagement with CCGs in PR19 worked better than at PR14. However, we agree that more guidance and/or engagement and greater explanation of the challenge given to companies by CCGs could have made the process more effective.

### 4.2.4 Welsh government and other stakeholders in Wales

Welsh stakeholders said they would have liked Ofwat to have engaged with them more, and for the engagement to have been more tailored to Welsh issues. The Welsh Government said they would have liked Ofwat to have attended the Welsh PR19 forum during PR19. Natural Resources Wales said that Ofwat could have produced more non-technical summary information.

In Water 2020 we actively engaged with Welsh stakeholders, including through the PR19 forum. We are committed to engaging effectively with Welsh stakeholders on all regulatory matters, including the development and implementation of price reviews. Going forward we hope that establishing our permanent presence in Wales will enable us to engage even more effectively in future.

During the assessment phase of PR19 we considered it prudent to engage with Welsh stakeholders outside of the Welsh PR19 forum – that includes water companies – in order to provide fair access to Ofwat between water companies in Wales and their English counterparts. During the assessment phase we engaged directly with Welsh Government to understand and respond to their views and to update them on our process. We will work with stakeholders in Wales to ensure that we engage with the appropriate groups and forums at the right times so we can effectively collaborate in the development of future price reviews.

It is challenging to communicate complex regulatory concepts to non-technical audiences; we will continue to seek ways to improve at this.

### 4.2.5 Defra and other stakeholders in England

Defra and other regulators in England said that they were pleased with the much deeper level of collaboration with them during PR19, and the high degree of transparency around Ofwat's processes. They said the engagement process worked well, and was a significant improvement on the process in previous price reviews. They said that there is a need to build on this collaboration, particularly on WINEP and environmental issues, to ensure that priorities and objectives are joined up. They did consider that big announcements could be better choreographed across organisations, and that joint messaging could be used more to send signals to the industry around regulatory expectations from a position of joint authority.

We are increasingly working collaboratively with colleagues across organisations in line with our strategy to deliver more for customers, the environment and society. The Regulators'

Alliance for Progressing Infrastructure Development (RAPID) has been set up to address the need for greater regional and national coordination of new infrastructure and to accelerate the delivery of major new resources. The WINEP review is similarly being taken forward as a cross-organisation initiative to ensure the next WINEP delivers the most it can for the environment and customers. We will consider where joint messaging, for example 'Building resilient water supplies – a joint letter from Defra, the Environment Agency, the DWI and Ofwat to water companies' could be used more in future. We look forward to working with colleagues across the sector to make these and future initiatives successful.

The water resources groups were pleased with Ofwat's engagement with them during PR19. Retailers were in general less content and did not consider they had been engaged with effectively through the price review, acknowledging that the business retail market opened at a similar time to the publication of draft methodology. We received limited, but generally positive feedback about our engagement with environmental groups.

We will continue to work with the other regulators in the sector when developing outcome performance commitments for future price reviews. However, given the different role of each regulator, it is appropriate that each regulator measures company performance in different ways that reflects its role and responsibilities.

Going forward we will continue to try to engage effectively with all relevant stakeholders. We continue to work closely with retailers on market issues, and will consider whether further engagement with them would be beneficial for PR24.

## Lessons learnt

- Our approach to company engagement, including the role of engagement managers and the query process, supported the delivery phase of the price review. We consider we had an appropriate balance of Board level and working level face to face engagement with companies, but will consider whether a different balance of engagement could be more helpful and/or practical in future.
- While some CCGs were happy with the engagement with Ofwat, others would like to have had more direct engagement and clearer guidance on their roles and responsibilities. If we require CCGs or similar bodies in the future, we will aim to ensure that the guidance is useful, clear, complete and timely and our engagement is more effective.
- Defra and other regulators in England were pleased with the much deeper level of collaboration with them during PR19, and the high degree of transparency around Ofwat's processes. The Welsh Government would have valued closer engagement with Ofwat during the process. CCW considered they had good communication with Ofwat and appreciated the clear, early information on Ofwat's expectations.
- We valued engagement with wider consumer and environmental stakeholders, such as Blueprint for Water and Citizens Advice, and their input into the process. We will look to build on this in future reviews.

- While we engaged effectively with a range of stakeholders, there are some, such as business retailers, who we could improve engagement with in future.

## Next steps

- We will work with stakeholders to ensure engage effectively with them in the development of PR24, including through workshops, working groups and the launch of the 'Future ideas lab'.
- We will continue to explore how to effectively engage with wider stakeholders with interests in the price review through the implementation period.

# 5. Customer engagement

Great customer service was one of the themes of the PR19 price review. To deliver on this theme, companies needed to start with an in-depth understanding of customers' preferences and priorities.

There was substantial improvement in the depth and breadth of customer engagement, which helped put customers at the heart of PR19. However, there are clearly issues with the evidence obtained from engagement; in particular there were large differences in estimates of customers' valuations between companies on common performance commitments.

In this chapter we consider the following aspects of customer engagement:

- overall approach to customer engagement;
- use of customer engagement evidence; and
- assurance of the quality and influence of customer engagement evidence.

## 5.1 Overall approach to customer engagement

PR19 put the onus on water companies to engage with their customers to inform their business plans. CCGs for each company provided check and challenge on this engagement.

Water companies have stepped up over the last ten years to engage more than ever with their customers. Our policy shift for PR14 started this journey and PR19 has taken it even further. We have promoted this shift through, for example, the Tapped In event held in 2017.[14]

Several water companies told us that their customer research was their proudest achievement from PR19. We also recognise the move in many water companies' cultures towards being more customer-centric at PR19.

### 5.1.1 Scale of customer engagement

To inform their business plans for PR19, water companies engaged with around 1.5 million customers, including learning from day-to-day interactions. To put that in perspective, two companies individually engaged with more customers for PR19 than the entire sector did for PR14. And PR14 itself saw a step change increase in the number of customers engaged. So water companies have extended their reach by listening to more customers as part of the price review process.

[14] Ofwat, 'Tapped In - From passive customer to active participant report', March 2017.

And the reach of customer engagement has not just extended in terms of the number and range of customers engaged, but also the period over which companies engaged. Water companies are increasingly moving from using one-off, price review driven customer engagement to ongoing engagement, although to different extents across companies. Moreover, we note that a number of companies have extended the role of their CCGs beyond any price review remit we set out for these groups. This cultural shift is of real benefit to customers as it means water companies will be better able to respond to evolving customer priorities. We believe this was in part driven by the importance placed on customer engagement in our PR19 methodology and its role in our IAP assessment, which considered many aspects of customer engagement, including whether engagement was on-going.

But we recognise that the scale of engagement is not everything: CCW recently reported that 'much more needs to be done to make water sector research meaningful for people to take part in'.[15]

### 5.1.2 Quality of customer engagement evidence

CCGs gave us feedback through their reports on the quality of customer engagement, how they had challenged water companies to improve, and the extent to which companies reflected the result of customer engagement in their business plans. CCGs were generally supportive of the engagement, with some reservations.

As part of our IAP, we reviewed the quality of customer engagement and found that the quality of the research submitted to Ofwat was mixed. Some companies demonstrated they had undertaken high quality research, with some innovative approaches being employed. But there were also examples where the approaches used were not sufficiently high quality for us to be able to rely on the evidence.[16] In addition, in many cases there were very large differences in the results of the engagement across companies that neither we nor companies could explain.

CCW's report 'Engaging water customers for better consumer and business outcomes' also notes that the customer research generated by companies during PR19 was of variable quality. The report argues that more needs to be done to improve the value and meaning of consumer research in future, as well as identifying several areas as being least appropriate for consumer research. These include business plan inputs where the subject matter is of a technical nature, is not directly customer focused, relates to very long-term planning and future scenarios or where the bill impacts are small. It also includes regulatory metrics such as setting performance targets and penalty thresholds, as well as complex surveys such as willingness to pay where respondents are required to assimilate large amounts of

[15] CCW, 'Engaging water customers for better consumer and business outcomes', May 2020.
[16] Ofwat, 'PR19 initial assessment of plans: Summary of test area assessment', January 2019.

information. The report found that engagement on ongoing business operations was better, although CCW said there was still room for improvement in this area.

Several companies and other stakeholders such as CCGs told us that they thought there would be advantages to introducing elements of consistent, nationwide customer research. Sector-wide customer engagement may enable better identification of regional variations, as the same estimation techniques would be used across areas, and so remaining differences could more robustly be attributed to differences in regional preferences.

The elicitation of customer preferences was also primarily done through specific customer research projects at PR19. But water companies already have an abundance of data on actual customer behaviour from their monitoring of network usage and customer contact information. More insight could be gained by making greater use of this data through more sophisticated analytical techniques. Some water companies are already using this sort of data. For example, Severn Trent Water analysed customer complaint data and identified an issue with low pressure, which then formed the basis for a bespoke performance commitment. We are excited to see what progress can be made in this field.

### 5.1.3 Cost of customer engagement

We received feedback from a number of water companies that high quality customer engagement is costly - smaller companies found this particularly burdensome.

- There is a significant financial cost to running customer research. One company told us that it cost them £20,000 each time they wanted to ask their customers a question, due to needing to buy in expertise.
- A significant amount of management time is spent developing, running and interpreting the results of customer engagement.
- The assurance processes, in particular CCGs, are costly both in terms of the financial costs and the time of the management team and the CCG members.

Given the size of the sector overall, there would only need to be a small percentage benefit to make these costs worthwhile. Moreover, it is right that management spend significant time ensuring they understand their customers. Nonetheless it raises questions as to whether costs can be reduced without reducing the effectiveness of the engagement. As suggested by companies and CCGs, nationwide research may be one solution to this.

#### Lessons learnt

- We welcome the increased focus on customers by water companies at PR19, building on the improvements made during PR14.

- There is evidence that customers struggled to engage in the more complex and technical areas of the price control; more work is needed to improve the value and meaning of consumer research in future.
- There were large differences in customer valuations between companies across a significant number of common performance commitments. This appeared to be the result of variations in methodology and approach rather than differences between customers.
- In some areas, collaborative, consistent, national customer research may be more cost-efficient and more effective.
- Greater application of analytical techniques to existing data, eg on customer complaints and network usage, could provide further insight over and above that gained from market research.

## 5.2 Use of customer engagement evidence

Our PR19 methodology set out our expectations that companies engage with their customers in the development of their business plans. But we were also clear that we would check and challenge this evidence, and that we would take account of wider evidence, consistent with our statutory duties.

Our review of customer engagement evidence used to inform company business plans revealed a number of issues, which required Ofwat to intervene to best reflect customer preferences and to protect customer interests.

- Some companies did not demonstrate a clear link between their customer engagement and their proposals.
- Some companies over relied on a small number of sources of evidence and/or did not triangulate evidence appropriately, which resulted in overgenerous incentives or less stretching performance commitments.
- Some companies relied on customer support to justify the scope and scale of investments where the need for the investment or its efficiency was not sufficiently evidenced.
- Although for some companies there was a link between their research and their business plan, their results were very different from the results of the broader sector, and companies could not explain the differences.
- In some cases, we believed the companies could go further than the performance level tested with customers without increasing costs, and that this would be in customers' interests.

Some CCGs and companies considered that the results of their engagement were not reflected in the final determinations.

We consider that our interventions better aligned the final determinations with customer preferences, taking account of the greater information available to us, including customer research from all companies and efficiency benchmarking. Nevertheless, we, and water companies, need to be sure that investment in customer engagement leads to meaningful results that can be used to inform ongoing operations, business plans and our final determinations. National research may help with this by reducing the variation due to differences in survey methodologies and enabling a better understanding of variations in research results.

### Lessons learnt

- Customer engagement evidence was not always applied effectively to inform business plans. We should consider how to ensure companies use this evidence appropriately in future price reviews.

## 5.3 Assurance of the quality and use of customer engagement evidence

CCGs were first introduced at PR14, and were retained and evolved for PR19. Their purpose, as set out in 'Ofwat's customer engagement policy and expectations for PR19' was to provide independent challenge to companies and independent assurance to us on:

- the quality of a company's customer engagement; and
- the extent to which the results of this engagement were driving the company's decision making and being reflected in the company's business plan.

CCGs were set up by water companies and consisted of a chair and a number of members, some of whom were remunerated for their time. 'Ofwat's customer engagement policy and expectations for PR19' set out our expectations for the independence and transparency of CCGs.

Progress made by companies has been helped by the positive contribution of the CCGs. Some companies noted they spent a lot of time working with their CCGs. Most companies have already indicated their intention to maintain their respective CCGs, although we note that one company has disbanded this group following our final determination. This suggests some companies found the CCGs useful.

We also appreciate that a lot of time and energy has been put into the price review by members of the CCGs over the past few years, and value their contributions. We would like to reiterate our thanks to all those involved.

There were some clear improvements in the CCG process at PR19 as compared to PR14. We have received feedback that the role of CCGs was more clearly specified, although it would have been helpful for guidance to have been published earlier in the process. That said, CCG chairs raised concerns during PR19 about their perception of 'scope creep'. Our requirement for the CCG contribution to PR19 did not change following publication of 'Ofwat's customer engagement policy and expectations for PR19' in May 2016. However, we issued an 'Aide Memoire for Customer Challenge Groups' in March 2018 to provide further clarity on the expectations we had for CCGs. We received mixed feedback on this, with some finding it very helpful, and others finding it less clear.

Some CCGs also set out specific challenges including that:

- we did not take proper account of CCG reports and – ultimately – the views of customers;
- while there was more involvement, particularly with CCG chairs, with Ofwat than at PR14, companies believed more interaction may have helped better inform CCGs on expectations of customer engagement; and
- limited information on comparative levels of company performance was available to the groups, and CCGs were required to submit reports at the same time as the companies submitted their plans. CCGs therefore felt they were not able to provide as effective a challenge as they would have liked. We note that company annual performance data published by Ofwat was only available for the first two years of the 2015-20 period at the time of the submission of business plans, which limited CCGs' ability to compare performance.

We explain above that our interventions did not disregard customer views, but better aligned the determinations with customers' preferences. In some cases, further challenge by CCGs may have avoided the need for these interventions – for example with regard to triangulation. However, we also recognise that some aspects of the work, including triangulation, are highly technical and not all CCGs may have had sufficient access to the right level of expertise.

There are inherent time limits for CCGs and Ofwat to engage during the process. Further engagement may have helped, but there is also a risk it could have undermined the clarity of expectations set out at the beginning of the process.

Finally we note that unfortunately, at PR19 not all CCGs provided the levels of evidence required to demonstrate that they were effectively operating at arm's length from their respective companies. While insufficient evidence of independence does not, on its own, mean that these groups were not acting independently of their company, this inevitably reduced the weight we could place on the evidence provided in their assurance reports. This issue has also been raised in CCW's lessons learnt review[17], which notes that since the CCGs' relationships with the companies can mean that the companies 'set the agenda', the current

[17] CCW, 'Lessons learned from the 2019 price review', October 2020.

model runs the risk of CCGs focusing on less material issues for customers and giving insufficient attention to more significant issues.

## Lessons learnt

- CCGs played valuable roles in the price review, such as ensuring companies' research covered all areas important to consumers and informing the setting of bespoke performance commitments and incentives.
- Feedback from CCGs was that some would have valued greater access to comparative information and the ability to compare their company's business plan with other companies' business plans.
- For PR24, consideration must be given as to whether the assurance model used for customer engagement at PR19 remains fit for purpose.

## Next steps

- We have published 'PR24 and beyond: Reflecting customer preferences in future price reviews – a discussion paper', which considers how we might reflect customer preferences in future price reviews. We welcome engagement from all stakeholders on this work, and expect to share the outcome of this review alongside our broader work on PR24 in May 2021.

# 6. Outcomes

The outcomes approach was introduced to the water sector in PR14. Outcome performance commitments are set to cover all aspects of service that really matter to customers. Financial performance commitments incentivised outperformance where it is valued by customers and compensated customers for underperformance.

Companies remain supportive of the outcomes approach and most stakeholders believed the PR19 outcomes regime pushed companies further than ever before to deliver great customer service. However, a number of issues were raised around elements of the outcomes approach. In this chapter we look at issues raised in relation to:

- common performance commitments;
- bespoke performance commitments;
- the specification of performance commitments;
- the reliability of outcomes data;
- the balance of incentives;
- the early submission of bespoke performance incentives; and
- interactions with other regulators on outcomes.

Stakeholders also raised issues with outcomes linked to customer engagement, which are dealt with in chapter 5: Customer engagement, complexity which are dealt with in chapter 13: Simplification and complexity, and the link between costs and outcomes, which is explored in chapter 7: Cost assessment.

### Lessons learnt

- Stakeholders are supportive of our outcomes regime and said that it pushed companies to go further than ever before to deliver what customers wanted.

## 6.1 Common performance commitments

PR19 built on the regime developed for PR14 by putting a significant emphasis on common performance commitments. Fifteen standardised metrics were developed. Three were set at the same level for all companies, using forecast upper quartile as a starting point for the performance commitment. Those relating to compliance were also set at the same levels. All other performance commitments were set at different levels for each company. In all cases, including the three common level performance commitments, companies could make a case for (further) adjustments to reflect regional differences, or for additional funding to reach the performance commitment level.

Companies welcomed the use of common performance commitments. They believed that they could enable central comparisons resulting in a more consistent and robust assessment, which would make it easier to protect customers. We agree that the development of common performance commitments enable more consistent and robust assessments.

Companies said that some performance commitments are too stretching and may not be achievable given the funding allowed, so that they would either not achieve their target or were likely to overspend their allowances. This is discussed in chapter 7: Cost assessment.

One company suggested that it would also help to change the narrative around outcomes targets to avoid the possible reputational impact from not meeting targets even where significant service improvements have been made. It suggested that setting a less ambitious 'performance commitment level' and a 'stretch target' would ensure companies are still incentivised to improve but would change the narrative from one of failure to improvement. Another made a similar suggestion that we set a target based on historic upper quartile and then impose a dead-band up to the forecast upper quartile, so that companies would only receive outperformance payments for performance beyond this more stretching level.

We will consider evolved or new approaches to setting performance commitment levels in PR24. However, we note that setting performance commitments at levels less than those we consider have been funded risks customers not receiving the service they have paid for, and not being compensated for not this. Similarly, having a deadband from the historical upper quartile to the forecast upper quartile may disincentivise improvements between these two levels and encourage complacency.

Some companies also felt that our determination did not take sufficient account of local and regional factors and/or their customer research, or reasons why current company performance varies significantly. As set out above, our methodology did allow for regional differences in common performance commitments and common service levels only apply to three of the 15 performance commitments. Given the information asymmetry between us and companies, in order to protect customers we required sufficient evidence for further adjustments. We accepted this evidence in some cases, but in many cases we found that companies' claims were unconvincing. One company suggested they did not have sufficient knowledge of other companies' circumstances to determine whether they were 'special'. This may have resulted from companies wrongly attributing performance shortcoming or cost inefficiency to regional issues or may arise from difficulty of accessing appropriate data ahead of business plan submissions to make robust claims. We recognise that customers may lose out if companies provide weak evidence for claims or adjustments that would be beneficial for customers. We will consider how to assess proposals for company specific adjustments for outcomes in the design of our future approach.

### Lessons learnt

- Common performance commitments enable comparison of performance between companies, empowering customers and challenging companies to improve service.
- The PR19 approach to common performance commitments allows for regional specific circumstances, although some companies said we set too high a bar to fully account for these.

## 6.2 Bespoke performance commitments

In addition to common performance commitments, companies could also propose bespoke performance commitments. Companies welcomed this, as it enabled them to innovate and reflect differing local, regional and customer priorities. Some also saw them as an important part of laying the groundwork for future common performance commitments.

Nevertheless, many companies said that having so many bespoke performance commitments added complexity to the price review and to in-period true-ups and reconciliations for Ofwat and companies. They noted that bespoke performance commitments are more difficult and time consuming to develop and assess due to the lack of common definitions and comparable data. Some also mentioned the challenge of demonstrating a sufficient level of stretch on the performance commitments because of the lack of comparable data.

One company suggested getting rid of bespoke performance commitments. However, most companies favoured keeping them and either placing a limit on the number of bespoke performance commitments a company can have and/or making some of the 'most common' bespoke performance commitments into common performance commitments for PR24. They said that this would enable an easier and more robust assessment as comparisons across common performance commitments can use comparable data, which would also better protect customers.

We note that bespoke performance commitments can play an important role in reflecting local priorities, and could have a role in developing future common performance commitments. However, we also agree it is easier to benchmark common performance commitments and note the issue with regard to complexity – this is discussed further in chapter 13: Simplification and complexity.

### Lessons learnt

- Bespoke performance commitments allowed companies to innovate and to cater for local circumstances, although they are harder to benchmark and increase complexity.

## 6.3 Specification of performance commitments

PR19 included a range of performance commitments to improve customer outcomes. We replaced the previous customer satisfaction metric – the Service Incentive Mechanism (SIM) – with two new measures, C-Mex and D-Mex, aimed at better measuring household and developer customer experience. PR19 performance commitments covered both service experienced by customers as well as long term resilience and the environment through four common asset health performance commitments, two common resilience performance commitments, as well as leakage and per capita consumption performance commitments.

Companies agreed that PR19 challenged them to achieve better customer service, including through C-Mex and D-Mex. CCW also agreed, although it suggested C-Mex could be strengthened by including the number of complaints in the measure. CCW also welcomed the common performance commitment measuring the number of customers on the Priority Services Register (PSR), although it wanted to ensure the performance commitment did not drive a focus on numbers rather than the quality of support provided and awareness of the support available.

Despite the inclusion of asset health and resilience performance commitments, some companies were concerned that PR19 focused too much on service improvements at the expense of longer term targets, resilience and environmental improvements.

We do not consider the comprehensive range of performance commitments focused on the short term or that improved operating performance somehow impedes improving long term performance. The PR19 process was intended to ensure that water companies did not lose sight of the long term; they were required to project their performance on a range of outcomes until 2035 as part of their business plans. At PR19, we have challenged companies to improve performance where they lag behind the rest of the sector. We use a full range of regulatory tools including enforcement action against companies that fail to invest appropriately and deliver required levels of service to their customers. As part of our strategy we have set out our expectations of a transformation in operational performance. We consider that PR19 was an important step to achieve this goal and will continue to work with the sector to enable companies to transform and to hold companies to account.

However, in part, the comments appear to be driven by concerns about the extent of the efficiency challenge, particularly for companies that were trailing in terms of efficiency and performance. The concern is that companies might focus on improving service at the expense of long term considerations. We explain in chapter 7: Cost assessment that the allowed costs are sufficient to deliver the required outcomes. We have also stated that we intend to maintain our outcomes approach in future price reviews and therefore any failure to deliver in the long term would have consequences in future price reviews.

Nonetheless, we agree that resilience is a key issue– the lack of visibility or direct measurements of it, and the potential lag between company action and the impact on

customers, means that it is not only important but also challenging to regulate. Moreover, as set out in chapter 3: Key themes of PR19, we are concerned about the limited focus that companies have on resilience. We will continue to work with our stakeholders, including companies and other regulators, to ensure that there is a focus on the longer term, including resilience and environmental improvements, as well as service delivery improvements for PR24. Things that we will consider include:

- how we reflect the long-term targets for performance commitments that companies presented in their PR19 business plans in future price reviews;[18]
- as set out in our strategy, work with the UK and Welsh Governments and other water regulators to set a number of strategic long-term targets for the sector;
- helping the sector to better communicate in a common language on asset health and resilience;
- working with companies to develop a better understanding of their approach to managing asset resilience; and
- how we can encourage companies to make decisions that maximise whole life benefits.

Some stakeholders raised a question around ensuring flexibility in company business planning, and suggested that there was a risk of setting five-year performance commitments which turn out to be inappropriate. There may be merit in this, although frequent changes in outcomes may also conflict with a focus on the long-term and it is also important to align the five years of allowed revenues to service delivery.

### Lessons learnt

- PR19 included a comprehensive range of performance commitments reflecting service to customers over 2020-25 and the long term and there was general support for these metrics. But there remains a concern that companies are not sufficiently focused on the long term.

## 6.4 Reliability of outcomes data

We introduced standardised measures for all common and bespoke asset health performance commitments in PR19. Companies were shadow reporting against these in the run up to PR19, and report compliance with standardised metrics.

[18] In our final determinations we recorded water company ambition in 'PR19 final determinations: Delivering outcomes for customers policy appendix', December 2019.

This was generally welcomed. But some stakeholders said that in order for a robust assessment of outcomes to be done at the price review and performance against these to be measured in-period, data quality needs to improve.

A particular concern was that not all data was submitted in a standardised manner across companies. One company has said that we should prioritise independent, horizontal audits in the 2020-25 period to ensure companies are calculating and reporting common measures on a consistent basis. They say that this is particularly important given the increased prominence of outcome delivery incentives.

Some companies have also questioned the credibility of the upper quartile forecasts we used for some common performance commitments, saying some companies submitted unrealistic forecasts.

We agree that standardisation is important to conducting comparative assessments. This was one of the motivations for setting common performance commitments. We also agree that in some cases, companies could do more to comply with the methodologies developed for these metrics. In particular, we note that companies' compliance with the leakage and per capita consumption metrics need to improve.

In general, however, we do not consider this has impacted on setting PR19 performance commitment levels. Compliance with the three upper quartile measures, in particular, was generally fit for purpose. In addition, most companies tested their performance commitment levels with customers and conducted cost benefit analysis, so we can consider the forecasts put to us as genuine forecasts of performance. Ultimately companies have to live by the levels in their determinations so they have limited incentives to over-forecast and be left with unachievable performance commitment levels. We note that companies also have incentives to under-forecast potential performance. However, we did recognise that some judgement would be needed in estimating forward-looking upper quartile performance and that companies can be over-optimistic in their forecasts, as well as pessimistic. This is why we used the upper quartile, rather than the frontier estimate, of performance commitment levels. Moreover, we only used the forecasts as a starting point and for water supply interruptions we relaxed the stretch considerably, after considering the full range of historical and forecast performance data.

### Lessons learnt

- Standardisation of the measurement of performance commitments, and compliance with these standards, is important, given the significance of these measures for customers and the increased focus on ODIs.

## 6.5 Balance of incentives

In PR19, each performance commitment had an outcome delivery incentive attached to it that could either be reputational or financial. Financial incentives could relate to under and/or out performance. Nonetheless, not all performance commitments with financial outcome delivery incentives had outperformance payments. This included those relating to statutory requirements and those where there was no benefit to customers from outperformance, or where customers did not support payments for outperformance. We also introduced higher 'enhanced' performance payments for very good (or very poor) performance.

Some companies said that they felt that the outcomes regime was asymmetric to the downside. They say that this discourages companies from innovating or going above and beyond.

Other stakeholders commented on the appropriateness of rewards, and the potential customer reaction, where companies outperform in areas which could be seen as 'the day job' such as leakage, sewer flooding and pollution incidents. One company suggested that changing terminology from 'reward' to 'funding on delivery' would help with this perception. CCW suggested making broader outcome delivery incentive payments conditional on getting a good C-MeX score might help.

Asymmetric performance incentives for service measures are not new and are likely to be appropriate in a sector where compliance with statutory requirements play a major role in performance. Up to 2015, performance incentives were predominately 'stick' and were intended to secure delivery of a minimum standard of service. Even so, at the time of the PR14 determination, companies typically considered that risk was asymmetric to the downside. However, on average the industry outperformed against its financial outcome delivery incentives by 0.2% of return on regulatory equity (RoRE).[19] Thus, history suggests that companies' assessment of risk may be unduly pessimistic.

[19] Industry outperformance was 0.2% of RoRE over the 2015-20 period based on a weighted average of companies' outcome delivery incentive net payments. A simple average of companies' outperformance in RoRE terms is positive but close to zero as larger companies have tended to outperform and smaller companies underperform. These values are consistent with our final decisions on the PR19 blind year reconciliation. These values exclude the residential retail Service Incentive Mechanism (SIM), and outcome delivery incentives relating to enforcement action and the non-delivery of schemes. The excluded outcome delivery incentives are a £16.8 million underperformance payment that was incorporated into enforcement action against Southern Water (Ofwat, 'Ofwat's final decision to impose a financial penalty on Southern Water Services Limited', October 2019, p.32), a £63 million underperformance payment relating to Thames Water's performance on leakage, which led to enforcement action in response to it to failing to meet its statutory obligations (Ofwat, 'Notice of Ofwat's imposition of a financial penalty on Thames Water Utilities Limited', August 2018) and a £130 million of underperformance payments in response to the non-delivery of a scheme specific outcome delivery incentive for Counters Creek where Thames Water did not deliver a strategic sewer (Ofwat, 'PR19 final determinations Thames Water – Accounting for past delivery additional information', p.16).

We also recognise the tension between incentivising outperformance and innovation and customers' perception that companies should not be over-generously rewarded, and will consider this in future price reviews.

Some companies commented that the methodology for calculating risk for outcomes, using p10 and p90 probabilities for the tenth and ninetieth percentiles needs to be clearly defined and understood at the beginning of the price review. Because the guidance was fairly high level, companies used different approaches making comparisons across companies difficult.

We kept the guidance on risk assessment high level so that we could understand how companies approached the assessment of risks in their plans and we consider the approach we used was fit for purpose. But we recognise the comparability issues this created. We will consider how best to approach assessment of these risks for the next price review, including whether to provide further guidance.

### Lessons learnt

- Although PR19 allowed for additional outperformance payments, companies were concerned that incentives were skewed to the downside. Customer groups were concerned that companies should not be rewarded for 'doing the day job'. The experience of PR14 suggests that companies' assessment of expected risk and potential downside may be unduly pessimistic.
- Companies considered that the approach adopted to measuring risk was not robust enough. We consider the PR19 approach provided a valuable cross check on the overall balance of incentives.

## 6.6 Early submission of bespoke performance commitments

Companies thought that the early submission of bespoke performance commitment definitions was helpful. However, they noted some ways in which this process could be improved. Firstly, companies would have liked to have longer to provide the information. Secondly, companies said that they did not get enough feedback on their early submission. Finally, they consider we made changes to the definitions late in the process.

Another stakeholder commented that the timing of the consultation on vulnerability measures introduced for PR19 was late in the process and they would have preferred a broader definition, covering issues such as measures of satisfaction and awareness.

Companies said that they would be in favour of an early submission at PR24, but that they would like more notice and time to prepare their submission, that they would like more feedback on their submission and that they would like 'no surprises' in terms of avoiding late changes to definitions.

We are pleased that companies welcomed the early data submission for outcomes. We will reflect on feedback on the process but note that it is important that the process is sufficiently agile and that, while it is not desirable, late changes and short notice consultation may sometimes be necessary and appropriate to provide the best protection for customers and the environment.

### Lessons learnt

- The early data submission for outcomes worked well, although companies wanted more time to prepare the submission and for us to provide more feedback.

## 6.7 Interactions with other regulators on outcomes

Some stakeholders commented that a more joined up cross-regulator approach to setting performance commitments could be beneficial. In particular, differences in the way that each regulator measures key metrics needs to be understood, and where practical, aligned. Doing so may make analysis simpler and make understanding company performance easier. It was suggested that creating joint environmental scorecards and performance measures could be beneficial.

We note that we included a bespoke outcome performance commitment on the Environment Agency's the Environmental Performance Assessment (EPA) for one company as part of PR19 and that several of the measures used in the EPA are outcome performance commitments. We also include the DWI compliance risk index (CRI) measure as a common performance commitment and event risk index (ERI) as bespoke performance commitments. As noted above, we have worked intensively with companies to ensure consistency in the definitions and reporting of data including on leakage and per capita consumption.

We will continue to work with the other regulators in the sector in the development of outcome performance commitments for future price reviews. However, given the different role of each regulator, it may be appropriate that each regulator measures company performance in different ways that reflects its role and responsibilities.

### Next steps

- We are committed to using an outcomes approach in future price controls. We will consider how we can improve the outcomes framework to benefit customers and the environment as part of our work on future price reviews.
- We intend to set up a working group on outcomes late in 2020 to help support the development of the future outcomes approach.

# 7. Cost assessment

To ensure that customers only pay the efficient costs of providing the service they receive, we challenged the cost proposals that water companies gave us in their business plans. We call this process 'cost assessment'. In PR19 the output of the cost assessment process was to set total expenditure (totex) allowances for companies for 2020-25. Our totex allowances are a material component of customer bills now and in the future; it was therefore important that they were set to reflect efficient costs to ensure companies have sufficient funding to deliver services over 2020-25 and the long term.

Our final determinations allowed £51 billion of expenditure and were based on evidence about best practice in the water sector, efficiency gains, and productivity gains in the economy as a whole. Some companies stepped up and challenged themselves in their business plans to improve their efficiency and had costs that were close to or better than our estimates of efficient cost levels. Where companies' plans were less efficient, we challenged those plans using our robust comparative benchmarking and assessment of company evidence, saving customers £6 billion across England and Wales without compromising service delivery.

In this chapter we explore lessons learnt in the following areas of our cost assessment:

- data for cost assessment;
- base costs – costs for routine costs to maintain a base level of service;
- enhancement costs – for improvements to the base level of service;
- retail costs – residential retail services, and business retail services for customers of companies whose areas are wholly or mainly in Wales (Dŵr Cymru and Hafren Dyfrdwy); and
- the overall level of stretch – linking costs to outcomes.

In this section we explore the lessons learnt in each of these areas.

## 7.1 Data for cost assessment

In this section we examine issues relating to the data we used for cost assessment. Making sure we have the right data – split in the right way between cost areas – is an important first step to ensuring that our cost assessment is robust.

### 7.1.1 Boundary between base and enhancement costs

It was important to ensure that costs were correctly allocated to base or enhancement costs so that we could assess them correctly. Identifying and removing costs incorrectly included as enhancements that were already funded through base cost allowances avoided customers

paying twice for these activities. In PR19, companies often submitted cost proposals as enhancement that we considered were base costs, which we therefore reclassified. This suggests a need to improve companies' understanding of the boundary between base and enhancement costs and potentially to improve our definitions of base and enhancements costs. It may also reflect an incentive for companies to categorise expenditure as enhancement to avoid the challenging cost scrutiny associated with base costs.

Improving the understanding of the boundary between base and enhancement expenditure will improve consistency in our benchmarking assessment of base cost proposals. It will also allow companies to understand which investment proposals are considered enhancement, and to focus on the evidence required to justify such proposals.

We will review base and enhancement expenditure definitions for PR24.

### 7.1.2 Multiple re-allocations of reported cost data

We required companies to allocate their enhancement costs into a number of categories to enable us to benchmark costs for similar investment proposals across companies. In a number of cases companies did not allocate costs appropriately into these categories – often including costs in 'free-form' lines in the data tables, which limited the scope for comparison and therefore our ability to challenge companies' costs. We therefore had to reallocate expenditure proposals between enhancement categories in many instances. This was a difficult process to present with full transparency and made comparisons between our determinations and the business plans more complex.

We will review our enhancement expenditure definitions and business plan guidance to help align business plan submissions across companies to avoid needing to reallocate in future.

### 7.1.3 Enhancement opex

In PR19 and PR14 we set allowances for totex. This replaced the previous approach of setting separate allowances for capital expenditure (capex) and operating expenditure (opex). We did this to remove the regulatory financial incentive for companies to favour capital solutions over operational solutions (the 'capex bias'). The totex approach gives companies more flexibility in how they deliver services to customers and so enables greater efficiency.

However, before 2015 we only set allowances for enhancement capex, not totex, so historically we only collected expenditure data on enhancement capex and neither totex nor opex. To address this issue, we asked companies to report enhancement opex as part of their business plan data tables for future years up to 2025.

During the price review it became apparent that companies used different assumptions to complete their enhancement opex cost tables. This required us to amend company data in order to make appropriate cost assessments for enhancement totex.

We will consider how to better capture enhancement opex and make appropriate base and enhancement allowances that account for any overlap to ensure cost allowances are sufficient to fund efficient costs and do not double fund costs through base and enhancement allowances.

## 7.2 Base costs

Base costs are routine, year-on-year costs, which companies incur in the normal running of their businesses to provide a base level of service to customers.

### 7.2.1 Econometric modelling

Our main tool for benchmarking costs across water companies to assess the efficient level of base costs was econometric modelling. This approach uses statistical techniques to estimate the relationships between costs and parameters ('cost drivers') that explain the difference in costs using comparative data across companies and over time. We consider that econometric modelling was a suitable assessment tool. Companies largely agreed that econometric modelling for the assessment of base costs was appropriate.

Between 2016 and 2018 we ran the cost assessment working group to work with water companies and other stakeholders on the development of our approach to cost assessment. We heard positive feedback that this working group worked well.

In 2018 we issued a consultation on econometric modelling for PR19. The consultation included econometric models for wholesale water, wholesale wastewater, residential retail and a limited number of enhancement activities.[20] We invited companies to submit their proposed models for the consultation. This resulted in a very large number of models to consult on – 382 to be exact.

We consider that the consultation on econometric modelling was effective, but we will consider how it could be improved for PR24. It may be helpful to focus more on model selection criteria with the aim of deriving a smaller number of higher quality models for consultation.

While we consider that the models at PR19 worked well, we will aim to improve our approach even further for future price reviews. We were unable to use some cost drivers in our econometric analysis due to a lack of confidence in the data (eg average pumping head). By

[20] Ofwat, 'Cost Assessment for PR19 – a consultation on econometric cost modelling', March 2018.

improving data quality and so being able to use a wider range of cost drivers we may be able to improve the explanatory power of our cost models and so improve our efficiency benchmarking. We will work with the industry to improve definitions and data capture for important cost drivers.

### 7.2.2 Scope of costs included in base costs econometric models

At PR19 we developed econometric models for base costs, rather than totex models. The removal of enhancement costs followed learning from PR14, and stakeholders supported it. However, as discussed above, the boundary between base and enhancement costs is not always well defined. This led to inconsistencies in cost reporting.

In addition to improving the understanding of the boundary between base and enhancement costs, we will consider which activities are best assessed as part of our base econometric models. At PR19 we included within the scope of our base econometric models costs that are mainly driven by population growth ('growth costs'), that we had previously treated as enhancement. We discuss this below.

At PR19 we excluded a number of categories of base costs from our econometric models ('un-modelled costs') based on the nature, controllability and our ability to model these costs. We concluded that for PR19 some costs that were included in econometric models in PR14, such as Traffic Management Act costs, would be more appropriately excluded from the models. For PR24 it is important that we continue to reflect on where it is most appropriate to put the boundary between modelled and un-modelled costs.

For PR24 we will also consider further which activities can be included in the scope of our base econometric models, and whether any costs currently defined as enhancement should be re-defined as base costs.

### 7.2.3 Growth and developer services costs

At PR19 we decided to include costs driven by population growth within the scope of our base econometric models. These included:

- costs of reinforcing the network as a consequence of new properties being connected;
- connecting a new property (eg a meter and a communication pipe, and connection to a sewer);
- providing new water mains or public sewers (ie requisitions);
- moving an existing main or sewer or other apparatus at the request of a third-party (ie diversions); and
- costs of enhancing sewage treatment works and addressing sewer flooding risk for properties.

Overall, companies requested about £4 billion of growth costs in their business plans for 2020-25.

Our assessment and modelling of growth costs was contentious for two reasons. First, we revised our approach at draft determinations to expand the scope of our base cost models to include some enhancement costs rather than doing so from the beginning of the process. We made this change following representations from stakeholders. Second, we included growth costs in our econometric models and did not alter the cost drivers in the models. Instead, we made a post-modelling adjustment to account for high growth and low growth areas, which we considered to be the most appropriate approach.

For PR24 we will consider how our approach to the assessment of growth costs could be improved. Importantly, PR19 exposed the need to have:

- better data for the assessment of growth costs to ensure consistent cost reporting; and
- proper consideration of the interaction with costs undertaken by self-lay providers, rather than the incumbent water company, for the provision of contestable services.

PR19 also revealed the importance of the interaction of our approach to growth costs assessment with other aspects of developer services, such as the developer services reconciliation adjustment and the incentive to make accurate forecasts of new connections.

For PR24 we will give early consideration to growth costs, data requirements and interaction with our wider approach, including considering the impact on developer services markets and our new connection charging rules.

For the cost of developer services (ie services for which companies can recover full or partial costs from developers) we will consider alternative options, for example setting a separate price control or considering the extent to which it might be appropriate to rely on competition for the elements of developer services which are contestable and/or open to effective competition.

### 7.2.4 Adjustments to base costs

We recognise that econometric models are not perfect and allowing for adjustments to the modelled results is an important part of the process. Our PR19 cost assessment framework allowed companies to submit cost adjustment claims in their business plans. Cost adjustment claims are mechanisms for a company to present evidence of unique operating circumstances, legal requirements or atypical expenditure which drive higher efficient costs for the company relative to its peers.

At PR19 we asked companies to submit to us information relating to performance commitment definitions and cost adjustment claims by 3 May 2018, three months before the

formal business plan submission.[21] We consider that the early submission was useful. It provided additional time for a proper consideration and decision on companies' claims. This was particularly important in the case of fast-tracked companies, given our commitment to provide early certainty in relation to cost adjustment claims whilst ensuring that customers were adequately protected.

Following our assessment of the costs adjustment claims, we rejected the majority of them. Some companies argued that the evidential bar we set for accepting cost claims was too high. They considered the fact that few cost adjustment claims were accepted, despite being an essential element of the methodology, undermined confidence in our approach.

We accepted cost claims where there was sufficient high quality evidence to support them. The large proportion of rejected claims reflects the insufficient evidence provided and misplaced nature of many of the claims. We are also concerned that the process was still one sided. We received a lot of cost claims from companies for additional funding, but none for less funding. We recognise that our modelling results are likely to be generous for some companies, in specific controls and so we would expect some cost adjustments to reduce cost allowances for some companies. We will consider how we can improve the cost adjustment process for the next price review, including how to implement symmetrical adjustments at PR24.

## Lessons learnt

- The boundaries between what is base, enhancement and growth costs, and the related but separate boundaries between costs that can be modelled and those that cannot are key to effective cost assessment.
- While we have further developed our understanding of cost drivers in PR19, there is still scope for improvement.
- We need to give early consideration to the assessment of growth costs, related data requirements and interactions with other aspects of developer services policy.
- There is scope to further improve our cost adjustment process by clarifying the evidence requirement, and considering how to implement symmetrical adjustments at PR24.

[21] Ofwat, 'IN 18/02: Price review early submissions on 3 May 2018 for performance commitment definitions and cost adjustment claims', March 2018.

## 7.3 Enhancement costs

### 7.3.1 General approach to enhancement costs

Our approach to assessing enhancement costs was to use benchmarking of forecast costs where appropriate cost drivers could be found. Where we were not able to use benchmarking due to the bespoke nature of proposed investment we assessed the evidence companies submitted. For more material requests we followed a deep dive process considering a number of aspects of the evidence we needed to see, and for less material proposals we allowed the costs to flow through with an efficiency challenge where appropriate. Our deep dive approach built on the approach that we had used for PR14 and for cost adjustment claims.

Our benchmarking approaches were much improved compared to our enhancement cost modelling at PR14. For some we had two cost drivers rather than the one cost driver as at PR14, and we were able to disaggregate supply-demand balance costs in order to benchmark similar solutions rather than using the deficit as an overall cost driver.

There were many deep dives where the evidence was not provided for us to be able to fully accept companies' proposals. In such cases we had to use relatively blunt instruments such as a 20% challenge for lack of evidence of a full options appraisal, and an efficiency challenge derived from base cost efficiency where there was little evidence of how the specific proposed costs were efficient. We provided feedback of what was lacking throughout the price review process in the expectation that companies would be able to fill the gaps in evidence in later submissions.

We note that some companies spent considerably less on their 2015-20 environmental improvement programmes than they forecast in their 2014 business plans, so using outturn information would guard against the risk of companies being overly pessimistic on savings they may be able to achieve when forecasting costs.

### 7.3.2 Supply-demand balance enhancement costs

In PR19 we undertook an earlier and more intensive level of engagement with the WRMP process and a more detailed review of the subsequent investment within supply-demand balance than for PR14. Overall, this resulted in an improved interface between WRMPs and business plans and a closer working arrangement between regulators and governments.

Some companies expressed a concern that our approach to assessing costs for supply-demand balance enhancement was not aligned with their WRMPs. As a statutory consultee on the WRMPs we aligned our approach to the assessment of WRMPs and the investment promoted through them in the business plans. As would be expected with a complex process, which aims to justify significant levels of investment involving several stakeholders with

different priorities and viewpoints, there were a few areas of misalignment. Most of these were resolved prior to the revised draft and final WRMPs being published. We note the finalised and published WRMPs remain living documents, but we also note that some companies' business plans were not robustly linked to their WRMPs

We accepted the need for investment to manage drought risk as justified by the WRMP and focussed on cost efficiency for the supply-demand balance investment assessment. Early sign off of investment and outcomes linked to the WRMPs would be difficult without the context of the rest of the companies' business plan proposals. Therefore, it is right that we challenge these costs in the price review as is explicitly expected of us in the 'UK government's strategic priorities and objectives for Ofwat' for companies operating wholly or mainly in England. We will continue to review our involvement and challenge at each stage of these processes.

### 7.3.3 Resilience enhancement costs

At PR19 we funded resilience expenditure through a combination of base and enhancement costs. We allowed companies to propose investment to enhance resilience to address risks that were not covered by another enhancement area or base costs under the category of 'resilience enhancement'. We accepted new proposals in this category to fund improved service resilience in the face of low probability, high consequence events, including expenditure to meet new, more onerous requirements arising from the National Flood Resilience Review.[22]

Many of the resilience enhancement proposals we saw before the draft determination stage were not aligned to companies' overall understanding of systems resilience risk, and some described activities that we consider to be covered by companies' capital maintenance programmes. We therefore published more detailed guidance on what qualified as resilience enhancement with draft determinations. We recognise this was late in the price review process, but considered it was necessary, given the proposals seen up to this point.

We will consider how best to make our expectations clear on the evidence we are looking for, particularly for proposals in areas where companies have more discretion to choose their investments, such as resilience enhancement.

We will consider how to gain assurance on forecast data and whether additional data sources may be used to assess forecast enhancement costs, such as outturn costs on similar historical enhancement investment.

We will seek to clearly define the distinction between base and enhancement costs and activities ahead of PR24, particularly for resilience enhancement proposals.

[22] HM Government, 'National Flood Resilience Review', September 2016.

### Lessons learnt

- Further clarity around our expectations of the evidence to support enhancement expenditure, particularly for proposals not driven by statutory requirements could help companies provide better evidence.
- We should consider how to gain assurance on the efficiency of forecast enhancement cost data and whether additional data sources may be used to assess forecast enhancement costs.
- It is important for us to closely engage with the WRMP process to ensure there is an appropriate and continuous level of assessment and feedback at each stage. Further embedding close working with fellow regulators and governments on WRMP prior to investments being proposed in the business plans, and ensuring that the expectations and timescales of the two assessment processes are clear and aligned is key.

## 7.4 Retail costs

Since we introduced separate retail controls at PR14, we have seen evidence that companies are increasingly focussed on outcomes and efficiency in delivering retail services. With less reliance on long-lived infrastructure assets, retail services can transform faster than wholesale services. The majority of companies submitted forecast costs at PR19 that were significantly lower than historical expenditure.

At PR19 we used econometric models to benchmark companies' costs and set efficient allowances, as we had sufficient confidence in the data to move away from the average cost to serve (ACTS) approach of PR14. We used three models. One for total retail costs, one for bad debt and debt management costs, and the other for all other costs (eg customer service, meter reading, depreciation).

Stakeholders provided limited feedback on residential retail during our engagement on lessons learnt. We consider that cost benchmarking is an effective tool to assess the efficiency of retail costs, and that an econometric approach lends itself well. Reflecting on PR19, we should consider whether the granular models are needed as part of the econometric modelling suite. The granular model were less robust than the total cost models and we have put less weight on them at PR19. We will consider whether the granular models can be improved, whether they should be split differently, or whether to adopt a different approach to the assessment of granular activities and the incorporation of this assessment into our total retail cost allowance.

We will also continue to develop more robust regional deprivation variables. Such variables are relevant for explaining variation in bad debt costs across companies. At PR19 we used income score data, which was not available on an annual basis. We also used data on the number of defaults commissioned from Equifax.

### Lessons learnt

- Retail costs are well suited to assessment using econometrics. We will consider how we can make our assessment even more effective through improving consistency of data reporting, exploring alternative approaches to assessing granular retail activities and investigating additional data sources for regional deprivation.

## 7.5 Overall level of stretch – linking costs and outcomes

At PR19, we set the base cost allowances using efficient historical performance, with an additional frontier shift. We also set performance commitments based on company forecasts of the forward looking upper quartile, evidence of historical improvements and benchmarking across companies. We assessed the overall level of stretch across costs and outcomes in the round, calibrating it based on both historical performance and company forecasts, to be achievable for an efficient company.

At PR19 we looked more closely at efficiency frontier shift and real price effects than we had done at previous price reviews. This has improved our understanding of these important components of the cost assessment process. We consider that this has been helpful for us and the sector to better understand the relative potential for the water sector to improve overall efficiency and to manage price effects.

Some companies have argued that cost and service levels should be more closely connected, and that our PR19 approach resulted in an unachievable level of stretch between costs and outcomes. In addition to either overspending or incurring underperformance payments, some companies have also cited the possible reputational impact from not meeting targets, even where significant service improvements have been made.

We disagree that the improvements set are not adequately funded. The base expenditure incurred by companies in historical years (which is the input to our base models) includes expenditure on previous performance improvement. Therefore the modelled costs should reflect similar improvements, and this is reflected in the PR19 performance commitments. We expect the scale of technological change over recent and future years will allow companies to exploit productivity gains and achieve further improvements within their base cost allowance. We supplemented our econometric modelling results with an adjustment process in which companies were able to make claims for additional costs. We considered those claims and representations and made an adjustment where the claims were well evidenced and appropriate.

We tested an alternative approach of including service quality variables in our econometric models, and so have the companies. These variables generally do not prove to be significant in driving costs, nor their effect on cost conclusive.

We also examined past performance in the sector and found that those companies that had delivered higher levels of service where also the companies with more efficient costs. The evidence suggests that companies either performed well on costs and outcomes or poorly on both – counter to the arguments made by some companies that better service costs more. This analysis was based on the available data and we will explore this further through our review of PR14. We will consider whether there is scope to address the issue through our econometric models, as some companies have suggested, and whether there are further improvements we can make to our approach.

## Lessons learnt

- Protecting customers requires us to challenge companies on both costs and outcomes and to ensure that these fit together in our determinations. As we hone our approach on both of these areas, the interface between them will require more attention.

## Next steps

- We will publish an indicative plan for PR24 in May 2021. This will reflect on the results of collaborative engagement with companies and stakeholders to begin the process of identifying PR24 cost assessment data requirements and to investigate approaches to base, enhancement, growth and residential retail cost assessment.

# 8. Risk and return

Our PR19 final determinations aimed to align the interests of companies and investors to those of customers by setting an appropriate balance of risk and return. Our aim was to incentivise companies to deliver stretching levels of efficiency and service that improve over time.

In this chapter we consider feedback on the key elements of risk and return and the changes we introduced to put the sector 'back in balance'.

## 8.1 Key elements of risk and return

We have allowed companies a reasonable return on capital based on a notional capital structure. This was a base return on capital that will vary depending on each companies' performance against its cost allowance and performance commitments in 2020-25. Where a company outperforms our allowed costs or expected service levels it should earn a higher equity return; where a company underperforms our allowed costs or expected service levels it should earn a lower return.

Well ahead of PR19 we had signalled that the legitimate expectation of lower returns would require companies to consider steps they might need to take to improve financial resilience ahead of the price review.

Our PR19 methodology set out our 'early view' of the cost of capital for 2020-25 to facilitate the development of company business plans. We confirmed that we would update our assessment of the cost of capital for our draft and final determinations to take account of the latest available market data and expectations.

Our PR19 methodology also set out that each company was expected to demonstrate a clear understanding of risk to the delivery of its business plan and to provide clear evidence of the risk management measures in place. It required companies to analyse the impact of upside and downside risk under the notional capital structure by reference to the return on regulatory equity (RoRE). This information enabled us to compare company plans so we could consider whether companies had appropriately stretching plans and accounted for risks.

The PR19 methodology also set out the basis on which we assessed company's approaches to cost recovery, including for the pay as you go (PAYG) and regulatory capital value (RCV) run-off rates, and our approach to the financeability assessment.

### 8.1.1 Cost of capital

We allowed companies a return on capital (the 'cost of capital') as one of the key building blocks of the price controls.

We received positive feedback that providing an early view of the cost of capital was helpful and that this would be good to do again for PR24.

We welcome the positive feedback on our decision to set out our early view of the cost of capital in the final methodology for PR19. This important step in the price review process enabled companies to take our early view into account when developing their business plans, set expectations and provided companies and investors with some early certainty. We will consider how to best reflect our learning from this in setting our PR24 methodology.

Two companies stated that the low cost of capital for PR19 was a missed opportunity to increase investment eg in resilience.

Please see the discussion on our assessment of companies' resilience proposals against the backdrop of the lowest allowed cost of capital for 30 years in chapter 3: Key themes of PR19.

### 8.1.2 Financial resilience

The financial resilience of water companies – their ability to withstand and recover from shocks from a financial perspective – was a key consideration for our assessment of risk and return.

One company said that the final determination would adversely impact its long term financial resilience. Another said that it could deliver in the short-term, but this would be at the expense of its longer term operational and financial resilience. It considers the final determination will see a material reduction in its credit quality and that of the wider industry, resulting in lower financial resilience and more costs for future generations.

Historically, some companies carried out a financial restructuring, increasing gearing levels to well above the notional level and in doing so returned equity capital to shareholders. High levels of gearing can reduce financial headroom to manage cost shocks, which, along with the lower expected return at PR19, and (in some cases) poor operational performance can put financial resilience at risk. Our approach at PR19 has been to move the sector back into balance by encouraging companies to take steps to improve financial resilience. Some companies have acted to reduce gearing and increase their resilience, such as SES Water, but others are yet to do so despite having committed in their business plans to this course of action to protect customers.

Our approach to setting the allowed return evolved from PR14, taking a detailed approach to the assessment of market data and taking account of the range of external evidence on the methodologies used to assess the components of the allowed return including, for example, the academic study commissioned by the UK regulators network (UKRN).[23] The market response for the listed companies so far provides evidence that the return we allowed at PR19 is considered reasonable to generous. There is evidence that companies have been able to outperform the benchmark index used in setting the allowed cost of debt since the final determinations – see 'Reference of the PR19 final determinations: Risk and return – response to common issues in companies' 27 May submissions to the CMA', June 2020, table 3.3. And companies financed at or near the notional structure have maintained high quality investment grade credit ratings.

### 8.1.3 Risk analysis using return on regulatory equity

We assessed companies understanding of and their approach to managing risk using analysis of the impacts of risks on the return on regulatory equity (RoRE).

One small company felt there was a disproportionate emphasis on the analysis of RoRE and that it suffered from the one size fits all approach. Another company expressed concern at how much the RoRE methodology has changed over the past 5 years.

Looking towards PR24, another company suggested that to drive more transparency and comparability, a top down approach setting a +/- % of RoRE for the industry with additional rewards / penalties for fast track and slow track / significant scrutiny companies would be more preferable than individual RORE ranges. Customers could then be consulted on how those rewards and penalties are spread across different outcomes and this would allow better understanding of regional differences.

We note the comments on the RoRE risk analysis. We also note there is inherent uncertainty in calculating RoRE impacts as the probability distribution for each outcome delivery incentive's impact and the correlation of impacts across incentives must be estimated. However the outcome of PR14 suggests that companies may be pessimistic in these estimations, with companies more likely to focus more on downside risks than scope for outperformance. It was ambitious to include the RoRE calculations in the financial model; as our focus was on RoRE calculations at the appointee level and for the notional structure only, it may be possible for the calculations to be simplified in future.

[23] Stephen Wright, Phil Burns, Robin Mason and Derry Pickford for the UKRN 'A study into aspects of the way in which economic regulators set allowances for the cost of capital in price controls', March 2018.

### 8.1.4 Financeability

Companies provided only limited commentary on our approach to financeability and to our assessment and interventions on PAYG and RCV run-off rates in our lessons learnt exercise. Adjustments we made to cost recovery rates and our focus on certain definitions of financial ratios were contentious issues for some companies in the determination process. That said, a number of companies did request adjustments to cost recovery rates and other adjustments such as dividend retention to address a notional financeability constraint. Our view remains that adjustments to cost recovery rates are an appropriate approach to resolve a financeability constraint, taking account of the interests of customers and companies.

**Lessons learnt**

- Providing early clarity on the cost of capital was welcomed and worked well as a means of setting early expectations.

## 8.2 Putting the sector back in balance

We also implemented a change in our price review methodology which we set out in 'Putting the sector in balance: position statement on PR19 business plans' on 31 July 2018 (the 'positon statement'). The changes, which we consulted on in 'Putting the sector back in balance: Consultation on proposals for PR19 business plans', April 2018, set out a programme of work to rebuild trust and confidence in the water sector in relation to companies' high dividend payments, levels of executive pay and levels of financial resilience.

Following the publication of the position statement, we assessed companies' proposals and commitments regarding their performance related executive pay and dividend policies in the IAP and commented on them through the price review process. We also commented on company proposals to maintain financial resilience in 2020-25. In addition, we introduced a gearing sharing mechanism in our final determination, the aim of which was to encourage companies to consider the impacts of their financing decisions on customers.

Our final determination set an expectation of a reasonable base dividend for a company performing in line with our determination and the issues companies should consider in varying that base dividend. One company considered that our expectations for dividend policy put the sector at a disadvantage compared to history. It argued that investors may be less willing to provide additional equity in adverse situations as a result.

We note however that dividends paid by some companies in 2010-15 and 2015-20 have been well in excess of the levels that might be expected given the levels of service provided to customers. In a sector that provides an essential public service, it is important that investor returns align with and take account of performance in delivering committed levels of service

to customers and wider stakeholders. The expectations we set out about the level of the dividends in 2020-25 are consistent with the level of the allowed equity return.

Another company considered that some themes such as dividend policy and executive pay could be better dealt with outside of the price review process.

Including an assessment of company proposals on dividend policy and performance related executive pay as part of our price review process helped to encourage companies to take steps to ensure improved alignment between the interests of customers and companies and their investors. We encourage companies to be transparent about their dividend and performance related executive pay policies and the price review was a useful way of encouraging companies to step forward on these issues, and we will take forward this work outside of the price review process.

Following our assessments through the PR19 process, all companies stated that they were committed to meeting our expectations on dividend and performance related executive pay policies. However, our determinations identified there remained some companies that need to do more to demonstrate that they are fully implementing them. We will continue to monitor how companies perform against our expectations through 2020-25. Following our review of each company's assessment of financial resilience, companies made a number of commitments that aim to further enhance the assessment in their Long Term Viability Statements in their APRs. This is intended to ensure that there is a demonstrable link between companies' dividend policies and their performance.

## Lessons learnt

- Including the back in balance agenda in the price review enabled us to drive companies to act to provide further protections for customers. Going forward we should continue our active work programmes on board leadership, transparency and governance and financial resilience that are being progressed outside of the price review. We will consider how future price reviews can complement this work.

## Next steps

- We will consider further the issues around the balance of risk and return in the development of our methodology for PR24.

# 9. Targeted controls

In this section we look at the lessons learnt from the introduction of further price controls and the other steps we have taken to support markets. The main challenge to doing this now is that the success of measures taken to support markets cannot be assessed immediately – they need time to be bedded in and for market participants to engage. We therefore cannot judge the full impact of these measures for some time, and so the lessons to learn now are primarily around process.

## 9.1 Price controls

In PR19 we split out water resources and bioresources from the previous 'wholesale' price controls to help distinguish between these potentially contestable areas and activities that are natural monopolies, covered by the network plus controls. The purpose of these new price controls was to 'shine a light' on these areas. This was shown to have benefits for customers in improving efficiency and service levels, and where appropriate to support the development of markets when we split wholesale and retail controls in PR14.

The splitting of the controls was well trailed and consulted on during the development of the methodology – a process we consider worked much more smoothly than the equivalent at PR14. This is borne out by the relatively little feedback around the process we received through the lessons learnt exercise. There was some support for separate controls shining a light on these areas, although there was acknowledgement of the trade off with additional complexity.

We consider that the introduction of these additional controls has been beneficial as it has focussed attention on these areas. Some of these benefits have already been realised; for example to set these controls, greater focus was placed on accounting separation between these areas, increasing our and the sector's understanding of costs. This has allowed companies to better understand their relative costs and revenues and to see these areas as separate parts of their business. It is too early to say how effectively the new controls will support the development of markets; we will monitor this impact through the price control period.

The approach to reconciliation of the price controls is discussed in chapter 10: Past delivery.

### Lessons learnt

- PR19 confirmed our view that introducing structural changes, such as new price controls, is best achieved by consulting on the changes early in the development of the methodology.

- Splitting the price controls for water resources and bioresources from the network plus controls has helped to increase focus on these areas, but at the cost of some increase in complexity.

## 9.2 Markets

### 9.2.1 Water resources

PR19 introduced several measures to support the development of water resource markets. We created separate water resources price controls, required water companies to publish a bid assessment framework to increase transparency for independent water resource providers, and provided funding for water companies to explore strategic water resources – including new reservoirs and national transfers of water from the North West to the South East of England. We also worked closely with the other regulators to help the WRMP process and the price review process work in tandem.

Many companies provided limited evidence on their engagement with markets in water resources in their business plans, with many trades long established. This included limited consideration of bilateral markets.[24] This conclusion is supported by our recent review of incumbent support for effective markets where we stated that companies needed to go further on water resources.[25]

Other sector regulators and water companies consider that the nexus between the WRMP process and the price review worked relatively well in PR19. However there was insufficient development of regional and national projects in company business plans. We therefore had to intervene to provide £469 million of additional gated funding to help companies work together on solving long term drought resilience challenges. The new regional water resource planning for the next review period should make the process more effective.

Going forwards, the creation of RAPID, which has been welcomed by the sector, will facilitate even greater cooperation between all of the sector regulators to support the development of water resources. It is important that we collectively work to improve the entire regulatory regime, not just the next price review, to support the delivery of water resources.

### 9.2.2 Bioresources

PR19 and the proceeding Water 2020 programme introduced separate price controls for bioresources and requirements for water and wastewater companies to publish bioresource

[24] Ofwat, 'PR19 initial assessment of business plans: Summary of test area assessment', January 2019, pp. 77-78.
[25] Ofwat, 'Review of incumbent company support for effective markets', August 2020, pp. 43-44.

market information. We received feedback that the bioresources working group was effective.

As part of PR19, many companies fell short of providing high quality business plans on bioresource markets with a lack of an integrated strategy for using third party delivery of treatment and transport of sludge. This included a lack of detail on third party engagement and insufficient detail on sharing profits between appointed and non-appointed businesses. The degree of trading set out in business plans was variable across companies, with short-term resilience trades more common and longer-term trades still at the early stages of exploration.[26] Again this is supported by our recent review of incumbent support for effective markets.[27]

To enable the future opening of the bioresources market, we allocated some existing RCV to the bioresources price control. Additional expenditure can add to this, but the guarantee of recovery is limited to pre-2020 RCV balances. We implemented this approach to protect customers from double funding assets that companies use in the bioresources market.

The steps we have taken to support the bioresource market in PR19 have undoubtedly increased the amount of information available to the market and should increase the focus on the opportunities from bioresource markets. We will consider the effectiveness of these measures going forwards and whether there is more that needs to be done to promote bioresource markets.

### 9.2.3 Developer services

Developer services are provided by water companies and third parties to developers building on new sites or redeveloping existing ones. For some activities water companies compete with self-lay organisations and New Appointments and Variations (NAVs). Only developer services provided by the 17 water companies are subject to PR19 price controls, with NAVs having separate regulatory arrangements. In PR19 we introduced a mechanism to incentivise improvements in developer services – the developer measure of experience (D-MeX). The costs for developer services are funded through the network plus price controls.

The treatment of developer services in price controls has been highlighted by a number of water companies as an area of concern. One issue is that we price regulate some services open to competition along with services that face less or no competitive pressure within the same price control. Secondly, there appears to be inconsistent allocation of costs between developer and other services within network plus controls across companies, which makes accurate regulation challenging. This is discussed further in chapter 7: Cost assessment. We acknowledge that there is potential scope for improvement and we are exploring how to improve our approach to the regulation of developer services across the board. We will

[26] Ofwat, 'PR19 initial assessment of business plans: Summary of test area assessment', January 2019, pp. 79-80.
[27] Ofwat, 'Review of incumbent company support for effective markets', August 2020, pp. 41-42.

consider how best to protect developer services customers while facilitating the development of the developer services market as part of the next price review.

### 9.2.4 Direct procurement for customers

As part of PR19, we introduced direct procurement for customers (DPC), a process for water companies to competitively tender for a third party (a competitively appointed provider, or CAP) to design, build, finance, operate and maintain infrastructure. This initiative has the potential to provide significant benefits for customers through promoting innovation and enabling capital and operational cost savings as well as a reduction in financing costs.

We are pleased to see the delivery of three DPC schemes confirmed in relation to final determinations and scope for a number of further schemes to be delivered through DPC. We acknowledge that there will be further development of the DPC process and we are working collaboratively with water companies and other stakeholders to ensure the regulatory environment evolves appropriately. We consider that regardless of the outcomes of the schemes being taken forward under DPC, introducing DPC has already delivered benefits as it is making companies think more about the costs of larger projects and how best that they can deliver them.

We note there were a number of issues with companies' evaluations of the potential for DPC delivery of schemes. For example some companies did not use a consistent approach to evaluate the value for money for in-house and DPC options.[28] The issue of proportionality was raised by some water companies in their feedback. Water companies that only had schemes under the materiality threshold did not consider it appropriate for them to be graded poorly on DPC in the IAP. We assessed the submissions based on their quality, not on whether the plans contained schemes that met the criteria for DPC. We consider that it was still helpful for small water companies to consider DPC as it got them to look at their own costs in a different way. We will consider how we can encourage companies to provide balanced assessments of potential DPC schemes while minimising any undue process costs in considering DPC as part of developing business plans.

### 9.2.5 Business retail

Due to the 15 largest water companies operating wholly or mainly in England exiting the business retail market, in PR19 we only set default tariffs for a small number of customers who have access to the business retail market.[29] We received feedback from one water

[28] Ofwat, 'PR19 initial assessment of business plans: Summary of test area assessment', January 2019, pp. 81-82.
[29] Business retail customers of Dŵr Cymru and Hafren Dyfrdwy can choose a different retailer for water supplies (but not waste water services) from those companies if their premises are supplied with at least 50 megalitres of water a year.

company and one business retailer that the price review could usefully have focussed more on supporting the business retail market. We consider that PR19 did support the business retail market, but it is not our primary tool for doing so. For example, we have separately undertaking a review of incumbents support for effective markets[30], and have worked with the sector to support retailers through the Covid-19 pandemic.

## Lessons learnt

- We should actively monitor the success of initiatives to facilitate the development of markets and the market outcomes.
- Improving our approach to collaborating with other sector regulators has benefited all of the planning processes; RAPID and other initiatives including the WINEP taskforce will build on this collaborative approach.
- There is scope to improve the approach to developer services and our approach to protecting customers while facilitating the improvement of the developer services market.
- The development of DPC illustrates the potential to introduce competition for the provision of finance and delivery of large infrastructure projects in the water sector. We will consider how we can facilitate the potential for DPC while ensuring that the process for assessing DPC schemes is streamlined.

## Next steps

- We will assess the impact of measures to support markets, including the developer services market, as part of the development of the methodology for the next price review.
- We will consider how to best share the learnings from the continuing development and implementation of DPC with all water companies.

[30] Ofwat, 'Review of incumbent company support for effective markets', August 2020.

# 10. Past delivery

In PR19 we assessed two areas under the heading of 'past delivery':

- companies' reconciliations of the PR14 incentive mechanisms; and
- the deliverability of companies' business plans, given their past performance.

This section covers the lessons learnt in these two areas, and considers the implications for the reconciliation of PR19 incentive mechanisms.

## 10.1 Reconciling PR14 incentive mechanisms

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, customer service, water trading and land sales.

Shortly after PR14 and following consultation with companies, we published reconciliation models and the 'PR14 reconciliation rulebook'.[31] This set out the methodology companies should use to calculate adjustments and so provided early clarity on how we expected to make adjustments to revenue and RCV in PR19 to reflect companies' performance during 2015-20. In PR19 we made determinations for the reconciliations using outturn figures for 2015-19 and forecasts for 2019-20 (the 'blind year'). We have now updated the analysis to take account of the final outturn figures for 2019-20 that were published in July 2020. We consulted on how we should go about applying the PR19 blind year adjustments in the 'PR19 reconciliation rulebook consultation', we consulted on the resulting adjustments in 'Adjusting for company actual performance in 2019-20 – Blind Year adjustment' in September 2020 and we confirmed our final decisions for these reconciliations in 'Adjusting for company actual performance in 2019-20: Blind year adjustment, final decisions, overview'.

We received a small amount of feedback on the PR14 reconciliation process.

One company stated that there were no significant issues in this area and another, when referring to data tables and modelling in general, commented that the flow from the tables and the models all worked.

Our consultation and publication of the PR14 reconciliation rulebook shortly after PR14 provided companies with the early clarity and understanding of the reconciliations needed for them to make high quality submissions for PR19.

[31] We first published the rulebook on 23 July 2015. It was then subsequently amended on 17 February 2016 and 4 October 2016 and we published the final amended version on 15 December 2017.

The quality and accuracy of the reconciliation submissions improved over the course of the price review as companies became familiar with the rulebook requirements and received detailed feedback from us. However at PR19 we had five iterations of reconciliation submissions. This created a lot of work for companies and Ofwat, with only marginal benefits from additional iterations. We reflect that it may be more efficient to reduce the number of submissions required for reconciliations in PR24, provided accuracy can be maintained.

We also received feedback from some companies who submitted claims under the wholesale revenue forecasting incentive mechanism (WRFIM) that this process could have been better. Elements of these claims related to errors these companies made in completing their PR14 business plan tables, which we considered were outside of the reconciliation mechanism's scope and addressed based on our wider error correction policy. We reflect that dealing with these issues through the price review was resource intensive.

We are taking steps to make it clearer when we consider errors to be unambiguous and simpler to address these. We have already produced guidance on our definition of an 'unambiguous error' that we intend to apply. However, for company specific ambiguous errors such as those described above, we envisage that there will continue to be a need for active and, where possible, early engagement between companies and Ofwat. See 'Information notice IN 20/06 July 2020: Approach to PR19 Blind year adjustments for 2019-20 performance' for more information.

### Lessons learnt

- The PR14 reconciliation process ran smoothly because the rules, models and process were set out clearly, in particular in the 'PR14 reconciliation rulebook'.
- It may be possible and beneficial to reduce the number of reconciliation iterations for PR24 from the five carried out for PR19.
- Where possible, it would be beneficial to resolve errors and address company specific issues before business plan submissions for PR24.

## 10.2 Reconciling PR19 incentive mechanisms

Following the success of the PR14 reconciliation rulebook, on 4 March 2020 we consulted on the proposed policy and approach to reconciling the PR19 incentive mechanisms in the 'PR19 Reconciliation Rulebook consultation'. The consultation closed on the 29 April 2020 and we published the 'PR19 reconciliation rulebook: guidance document' in December 2020.

We also received some feedback through our lessons learnt exercise on the proposals for PR19 reconciliations. Some companies would like to see the number of reconciliation mechanisms rationalised and the process simplified. There are 20 reconciliation models for PR19, which form part of the rulebook, up from around 8 per company for PR14.

The reconciliation mechanisms incentivise companies to collect the right amount of revenue, minimise bill volatility and deliver on, and potentially exceed, their stretching performance commitments. The increased number of reconciliation mechanisms reflects an intent to increase accuracy of cost allowances, so that customers do not pay for outputs not delivered, and to protect companies against risks outside their control. The number of reconciliation mechanisms is part of the broader issue of complexity, which is considered further in chapter 13: Simplification and complexity.

We are considering how we can make implementation of our price controls more proportionate and avoid any undue administrative burden in the context of our reconciliation rulebook. We note that there may be some need to trade-off protection of companies against risks outside their control and accuracy of cost allowances with the simplicity of the price control.

Some companies also requested more early engagement with Ofwat to ensure they understand the reconciliations before the first year of reporting in 2020-21. We will consider how best to engage with companies to ensure that they understand the reconciliations mechanisms and process.

### Lessons learnt

- The current suite of PR19 reconciliation models is large and there could be merit in rationalising it before the next price review, noting this may have implications for allocation of risk between companies and customers.
- Companies want to engage with us so they fully understand each reconciliation before the first year of reporting in 2020-21.

## 10.3 Deliverability

In PR19 we introduced an assessment of the deliverability of business plans to understand how well companies had and were forecast to perform over 2015-20 and, taking this into account, whether they had learnt lessons and put measures in place to ensure deliverability of the 2020-25 business plans.

No stakeholders commented on the deliverability assessment in the lessons learnt exercise, but we have a number of reflections.

We consider that the deliverability assessment was a valuable addition to the price review, as it gave us a greater understanding of company performance, and hence whether the business plans were achievable. This is valuable to customers given the potential rewards to companies from attaining fast-track status for their business plan. It resulted in modest but important changes to the setting of some outcomes. If we were to include a similar

assessment in future, we should consider whether the impact could be greater by, for example, strengthening more outcome delivery incentives where we have delivery concerns. More generally, we will consider the role successful delivery of PR19 business plans should have in any future equivalent to the IAP.

However, it was not clear that the companies understood our objectives for this part of the assessment or what was required from them as in many cases the evidence needed several iterations from companies. This could be because, despite both looking at 'past delivery' the deliverability and reconciliations assessed very different things. In future it may be more effective to separate the deliverability assessment from reconciliations, be clearer on what we are trying to achieve with the assessment or to consider introducing stronger incentives in this part of the price review.

### Lessons learnt

- The impact of the deliverability assessment on water companies' business plans and determinations could be increased by strengthening focus and/or incentives in this area.

### Next steps

- We should consider what engagement with companies is needed to ensure the reconciliation mechanisms and process are fully understood before the end of the first reporting year.
- We will consider whether company specific issues with reconciliations can be addressed as they are identified to simplify the reconciliation approach for the next price review and to give certainty to companies and customers.

# 11. Data tables and financial modelling

This chapter covers the development of the business plan data tables ('data tables') and the financial model.

## 11.1 Process for developing the business plan data tables

In our PR19 final methodology we stated that we need high-quality business plans supported by a consistent, accurate and assured set of information across companies.

Our data requirements for PR19 revealed more granular information than ever before to allow us to set additional price controls for water resources and bioresources. This also enabled us to assess companies' business plans and costs more effectively.

The process for developing the data tables began in early 2016 when we considered the data required for cost assessment purposes in PR19. Working with companies, we requested early cost assessment data submissions in 2016 and then again in 2017.

We consulted on the draft business plan tables with our PR19 draft methodology in July 2017, providing updated business plan tables with the final methodology in December 2017, and final business plan tables in May 2018. We ran an extensive query process, dealing with around 1,200 queries on the draft business plan tables. We had concerns with the quality of water companies' data and wrote a 'Letter to companies on PR19 information quality' in March 2018 setting out these concerns and asking them to improve for business plans. We would not expect for this to be necessary if companies took sufficient ownership of their data. The high level of engagement resulted in far better completion of business plan tables than in PR14, with nearly all companies completing the tables appropriately.

Our decision to start working with companies in 2016 on cost assessment data arose from the learning at PR14 where we identified the need to develop data sets early in the control period to refine and improve the modelling of costs. Data collected through the cost assessment working group was effective and helped improve data consistency in this area.

The query and clarification process was run effectively but it involved considering a large number of changes, many of which were trivial or duplicative. The positive feedback on the cost assessment working groups suggests that running more working level workshops with companies could be a more efficient way of engaging on the data requirements for PR24.

In 'Ofwat's forward programme for 2020-21' we set out an ambition for 2020-21 to make better use of data and to support this goal through our data strategy. This will include developing our thinking on how the sector could use data to its full potential. Underpinning this is how we could support the sector to work collaboratively to improve consistency and

develop definitional standards across their systems, not just for regulatory reporting. We will also consider how regulators could work together to use common definitions where appropriate.

### Lessons learnt

- The completion of the financial model and data tables by companies was far better than in PR14. But achieving this required leadership from Ofwat; going forward, companies should take more ownership of the quality of their data.
- Engaging early on the data tables allowed the numerous queries to be resolved and so made the tables easier to complete. But the queries process was laborious and could have been streamlined through alternative engagement approaches like workshops.
- Working early with companies to collect data for cost assessment purposes was effective and increased the consistency of data in the models.

## 11.2 Coverage of the business plan tables

The final suite of data tables published on 30 January 2019 contained 118 tables. Over half of the data tables provided information for the purposes of financial modelling and cost assessment.

The data requirement for PR19 needed to increase to allow us to set the more disaggregated wholesale price controls agreed with the sector through 'Water 2020: our regulatory approach for water and wastewater services in England and Wales' and associated licence modifications. The additional data also enabled us to set an independent efficient baseline estimate of required expenditure and understand and model financial ratios for notional and actual company structures.

We recognised that we were collecting more information than at PR14, but we did seek to minimise data requests and focus the business plan data requirements to only that which we need.

A good understanding of detailed costs and their associated drivers is important for the efficient operation of companies. We expect companies to be able to provide information to demonstrate their cost efficiency to Ofwat. We recognise from the feedback we received that the provision of data in PR19 was a significant burden, particularly for smaller companies. We will explore whether we can make more use of the synergies with the data we already collect in the APR to reduce the data burden for PR24. We also expect companies will explore the opportunities created by developments in data science to gain a better understanding of costs and to reduce their costs of gathering the relevant data.

Some companies noted it was not always clear what particular items were being collected for. Being clearer about why we are asking for data and providing more guidance on our expectations for data assurance could improve the quality of the data and the accompanying assurance.

### Lessons learnt

- There is scope to improve the data collection process going forwards through better use of technology to reduce duplication of data provision – including between business plan and APR submissions, better in-built checking and updating of data and improving the data submissions processes.
- Making clear the purpose of the data collected would assist in ensuring that we focus on collecting the most relevant data.

## 11.3 Development of the financial model

The process for developing the financial model for use in PR19 began in February 2016 when we started to rebuild the PR14 financial model in FAST standard[32] to improve its usability, functionality and auditability. We decided to start work early on the financial model following lessons learnt from the development of the PR14 financial model.

We held a workshop with companies in October 2016 and a webinar in March 2017, with an external review of the financial model in early 2017.

In July 2017 we consulted on a draft PR19 financial model, rulebook and data tables with our draft methodology. We published a final version of the PR19 financial model and rulebook in December 2017 with our final methodology, and a revised version of the financial model in May 2018, following a further external review and additional queries and clarification from companies.

Both we and companies consider that, compared to PR14, the standard and usability of the financial model was much improved, even with the added complexity. The model worked more effectively, including with regard to the flow of data from the data tables, meaning companies could use the model reliably.

Early engagement involving the subject matter experts worked well. Sharing the financial model, including the Beta version, was a more efficient process than at PR14.

In PR19 we required companies to complete their financial projections using our published financial model. This helped improve consistency by ensuring analysis was on a like-for-like

[32] https://www.fast-standard.org/

basis. It also reduced the burden on smaller companies, who would not need to commission the development of bespoke financial models.

We subjected the financial model to extensive consultation with companies and two separate external reviews. This gave us confidence in its operation. During PR19, we observed clear evidence that companies were able to use the financial model and successfully provided completed models with their business plan submissions.

For PR24, we will look to build on the success of the PR19 approach and are currently considering where we can make improvements to the financial modelling process in terms of simplification and improved functionality.

## Lessons learnt

- The process of early engagement and collaboration of the development of the PR19 financial model was successful and should be built on for future price controls.

## Next steps

- As part of our data strategy, we will actively support the sector – including companies and other regulators – in working together to improve consistency of data and develop common data definitions and standards.
- Where possible, we will give early sight of new data requirements, so companies can collect this annually rather than provide it retrospectively at PR24.
- Where possible, we will look to simplify, rationalise and target the business plan information requirements for PR24 by linking the data requirements to the PR19 and the APR data submissions.
- We will consider how to provide more clarity on how data will be used and the degree of assurance required.
- We will consider how to build on the PR19 financial model following a similar early engagement process with companies and seek to release a timetable for the development of the new financial model as soon as possible.

# 12. Initial assessment of business plans

The IAP was introduced to give reputational, financial and procedural incentives for water companies to submit high quality, ambitious and innovative business plans. We set out in 'Delivering Water 2020: Our final methodology for the 2019 price review' what we would test in the IAP. We tested the business plans against these criteria and placed them into three categories – fast track, slow track and significant scrutiny; no business plan met the high bar for the fourth 'exceptional' category. We then gave each company financial, procedural and reputational rewards or penalties based on its categorisation.

In this section we examine how effectively the IAP incentivised companies to submit their best business plans first time, and to improve their plans, and how well the IAP process worked. We acknowledge that there could be benefits from simplifying the equivalent of an IAP in future, but need to consider whether this would reduce the benefits to customers and the environment. This issue is discussed in more general terms in chapter 13: Simplification and complexity. Issues relating to IAP documentation are covered in chapter 14: Programme management.

## 12.1 Incentive properties of the IAP

### 12.1.1 Incentives to submit high quality, ambitious and innovative business plans

Three water companies, covering almost 30% of customers, submitted plans that were sufficiently high quality for us to classify them as 'fast-track'. These companies, and several others told us they were motivated by the IAP, and the reputational benefits in particular, to aim for this status. We were able to use the high quality business plans to help challenge the rest of the sector to deliver more for customers and the environment. We therefore consider the IAP was effective and worthwhile.

But many companies questioned whether the financial and procedural incentives of being fast track were sufficient, and that both were weaker than at PR14. However, only one company told us it made a conscious decision not to go for fast track status because in its view the costs outweighed the benefits. There is also some evidence from companies that there were procedural benefits of fast-track status on the operations side, if less so on the regulatory side. Companies highlighted the 'early certainty' principle in particular as not being as desirable as the 'do no harm' principle used in PR14, as it removed risk symmetrically and a lot of decisions were left to the final determinations. We note that the do no harm principle in PR14 meant that customers bore all of the risks around potential changes in the process; while this is more favourable to companies, this comes at a cost to

customers. The key question is whether the costs to customers are compensated by any additional stretch by companies in response to the stronger incentive.

The fast-track companies told us that they did not receive sufficient information on the early certainty principle, and what it entailed, before having to make a decision on whether or not to accept it. Two fast-track companies choose not to take early certainty for all or some elements of their draft determinations. One fast-track company said it felt it was worse off at the final determination stage, and this would have been avoided under the 'do no harm' principle. Consequently, many companies, including fast-track companies, said that they would have to think carefully before deciding whether or not to aim for fast-track status in PR24, unless the incentives and certainty around the process were increased.

We consider that the reputational, financial and procedural incentives package for fast-track companies were effective in PR19 because they did result in three companies pushing themselves to do more for their customers and so receiving fast-track status. The financial incentives for fast-track were proportionally lower than for PR14's enhanced category. However the top category for exceptional plans had a higher incentive than fast-track that was broadly equivalent in value to that for enhanced status. No company met the bar for exceptional status; we will reflect on why, and whether it is helpful to have an equivalent category in a future equivalent mechanism. We note that having a really stretching top category similar to exceptional status have been successful in other regulatory contexts. For example in Victoria, Australia, one of the 16 water companies assessed so far under the 'PREMO' regulatory framework achieved the top 'leading' categorisation.

We acknowledge the potential trade-off between providing sufficient early certainty to fast-track companies, to provide procedural benefits, and potential costs to customers. We should consider whether it would be beneficial to strengthen procedural incentives in future prices reviews.

We also observe that the three companies that achieved fast-track status were also the three publically listed companies. We consider that reputational incentives of fast track status for listed companies may have a greater effect than for privately held companies and will reflect further on the implications of this for design of regulatory incentives.

We will consider using an incentive like the IAP for future price reviews, as it delivered real benefits for customers, companies and us by focussing companies on producing their best plans first time. If we do, we will give careful consideration to the package of reputational, financial and procedural incentives to strengthen these as appropriate and to incentivise companies to submit high quality business plans.

### 12.1.2 Incentives to improve business plans post submission

The IAP was designed to incentivise companies to submit their best business plans first time. But where companies fell significantly short and were categorised as 'significant scrutiny', we also found the IAP, and subsequent application or not of penalties strongly incentivised companies to improve their plans post submission.

However, because this was a change in application of the penalties for significant-scrutiny status, some companies questioned whether these penalties were big enough. Many slow-track companies felt that there was little difference between the process and resulting cost sharing rates for them and significant-scrutiny companies. The significant-scrutiny companies welcomed the opportunity to respond to the IAP and improve the quality of their plans in order to avoid penalties.

We consider that the significant scrutiny categorisation worked well to incentivise companies after the IAP to achieve better outcomes for customers. This, not punishing companies for poor performance, is our ultimate objective. We were pleased to see that most significant-scrutiny companies responded positively and proactively to our initial assessment and so consider our approach was effective.

Some slow-track companies stated that we did not give them sufficient incentives beyond the IAP. Companies suggested that we should provide incentives to improve plans throughout the next price review for companies in all non-fast-track categories. We note that the main purpose of the IAP was to encourage companies to submit great plans first time and to enable Ofwat to use high-quality plans to intervene in customers' interest for companies that do not provide high-quality plans. It is not realistic to expect that the IAP incentives would have resulted in high-quality plans from all companies. Several slow-track companies also commented that the 'slow track' name was difficult for companies. They said that it created unhelpful media attention for them as 'failing' companies and that it adversely affected the reputation of the industry when 14 companies of the 17 companies were portrayed as failing. Some suggested that 'more evidence required' or 'standard' rather than 'slow track' categorisation would have been more appropriate.

We consider that the best solution is for companies to respond to the initial incentive, and submit a high quality, ambitious and innovative plan in the first place. There is a risk that providing additional positive incentives after the IAP – or equivalent stage – could undermine this. However, we will consider the merits of providing further incentives after the IAP for the slow-track equivalent category. We will also consider the merits of a change in description of this category. We will consider whether there should be direct financial penalties for both significant-scrutiny and slow-track or equivalent status. This approach has been used in other sectors, for example by Ofgem (see Ofgem, 'RIIO-2 Sector Specific Methodology - Core document', May 2019, chapter 11, Business plan and totex incentive). Our price review methodology could potentially set out a mechanism for the suspension of some or all of the penalty to provide an incentive to address issues in the business plan.

### Lessons learnt

- Customers benefited from the IAP as it provided effective incentives for water companies to submit high quality, ambitious and innovative business plans. We should consider using a similar incentive in future.
- Fast-track status was considered less beneficial to companies than the PR14 'enhanced' status, in particular around the procedural benefits. However, it also placed less risk on customers than the equivalent PR14 incentives. Publicly listed companies also appeared to respond more keenly than privately owned companies. Strengthening the incentives may increase the benefits to customers and the environment, if it incentivises better quality and more stretching business plans.
- The IAP created a strong incentive for significant-scrutiny companies – but not slow-track companies – to improve their plans beyond the IAP stage. We should consider whether a future equivalent process could create stronger incentives for more companies to improve their plans after the IAP, including through expanded use of financial penalties and clarity in advance of submission of plans as to how penalties may be abated.

## 12.2 IAP process

### 12.2.1 Methodology

Most companies felt that the IAP criteria were clear, well laid out and followed our methodology. Some companies commented on the perceived lack of risk and prioritisation in the published assessment where the 'in the round' assessment did not give explicitly different weights to each assessment criterion. Some companies questioned whether we had set the bar too high for the IAP, given the resulting spread across categories.

We consider that the assessment criteria were effective but, reflecting the broad scope of PR19, that there were a large number of tests. This falls into the broader debate in chapter 13: Simplification and complexity and we will consider scope to simplify the process while continuing to deliver benefits for customers and the environment. We still consider that the 'in the round' approach to assessment was most appropriate because it enabled us to take into account a broad range of factors when we reached our decisions without the loss of nuance that a more mechanistic approach may have had. We will consider for future reviews where the bars should be set, but it appears the sector could stretch itself further, and so we are not convinced PR19's bar was too high.

Some companies mentioned what they consider to be the downsides of the competitive element of the IAP. One company said that the 'homework marking' exercise forced companies to focus on delivering for Ofwat rather than in the best interests of their

customers. We do not agree as the IAP encouraged companies to stretch further for customers and the environment on performance and efficiency. Another company said that Ofwat's reduced engagement with companies to make the competition fair means that companies are less willing to take risks, leading to more homogenous rather than better plans. We consider that the competitive elements of the IAP are important for creating the incentives for companies to do well. We think it was vital for us to test that companies' plans got the basics right. But it is also important to note that the companies we fast-tracked were the ones whose plans went the extra mile for customers, so we consider the IAP did incentivise the right behaviours. We recognise that there are pros and cons of us limiting engagement with companies to make the competition fair. This issue is considered further in chapter 4: Stakeholder engagement.

### 12.2.2 Feedback to companies from the IAP

Most companies were pleased with the quality, clarity and structure of the feedback we provided following the IAP. They said that it was clear to see how we had reached our decisions, even if they did not agree with them. They felt that our feedback helped them to improve their plans for the draft determination stage. Only one company said it thought the IAP process felt arbitrary and that it was not clear how Ofwat was objectively distinguishing between companies. Some companies said that providing more of an overall summary in addition to the test scores would have helped them understand how their overall plans were received.

We reflect that while generating this feedback was resource intensive, it was key to us making evidence based decisions, and so being the sort of regulator we want to be. We were pleased to hear this was broadly considered effective and will seek to build on this in future, while taking account of the merits of simplifying the process where appropriate.

### 12.2.3 Fast track draft determinations process

Fast-track companies felt they did not benefit a great deal from having early draft determinations. This was partly because the modelling was updated for the other companies' draft determinations, but they considered that we did not make the implications of this for fast-track companies clear enough. They therefore needed to assess the impacts for themselves and so had less up to date information than the other companies.

We consider that the fast-track determinations still had benefits for the companies, particularly those who opted in to early certainty on some aspects of the plan. But we recognise that this could work better; if we were to run an equivalent to the IAP again we would consider what information we would need to publish and how best to implement an equivalent to the early certainty principal. We also note that the fast-track determination

process had procedural benefits for Ofwat, as it allowed us to flush out issues by running the process for a small number of companies in the first wave.

### 12.2.4 Links from the IAP to other regulators' processes

Defra, the Environment Agency and the DWI raised concerns around the differing approaches to assessing water companies' performance, which means that companies can be classed as good and poor performers under different regulators' assessments at the same time. This may lead to mixed messages to wider stakeholders and, for companies to be unclear about regulatory priorities.

The Environment Agency and DWI would also like Ofwat to take greater account of recent and ongoing performance when categorising companies, and for assessments outside of the price review to have increased focus.

We agree that the communications around the IAP and other regulators' assessments of companies' performance is important. We do not consider the fact that these assessments differ to necessarily be an issue as the regulators assess different aspects of companies' performance. We consider it is best for all of the regulators to hold companies to account in their areas of expertise. It is also important to recognise that while the IAP took account of past delivery when assessing deliverability of the business plans, its primary focus was and should be the quality of the companies' forward looking business plans. But it is important for the regulators to work closely together to ensure we communicate consistent messages.

As discussed above, in PR19 we did take past performance into account when categorising water companies, for example, one of the conditions for South West Water's categorisation as fast-track was that it introduce a performance commitment with a financial outcome delivery incentive to significantly improve its environmental performance. We will consider whether to give greater weight to the performance delivered in previous periods versus that promised in business plans by companies.

#### Lessons learnt

- Setting a clear methodology in advance, abiding by the methodology, and providing structured feedback to companies made the IAP process effective and transparent. For any future equivalent process we should adopt a similar approach, while considering whether simplification could reduce costs for Ofwat and companies without losing benefits for customers and the environment.
- The IAP and other regulators' assessments can differ as they measure different aspects of performance, but it is important that the messaging is clear around how these different assessments come together across regulators.

## Next steps

- We will use the IAP experience to inform our future price review design of incentives for water companies to submit their best business plans first time and improve them throughout the price review process.

# 13. Simplification and complexity

The price review is a key means for Ofwat to deliver significant benefits to customers, the environment and society by promoting better service, improved resilience and efficiency. However, the price review also imposes direct and indirect costs for Ofwat, water companies and ultimately customers. Additional granularity, process or scope of the price review framework can increase complexity and costs. A significant majority of stakeholders have told us that they consider PR19 to be very complex.

We recognise that PR19 is indeed complex. But we consider everything in the price review is there for a reason – to deliver the best outcomes for customers, the environment and society. And indeed some aspects have been simplified relative to previous price reviews, such as the removal of logging up and logging down mechanisms and serviceability adjustments. We do not consider that the complexity of PR19 is significantly higher than at PR14 or PR09. PR19 examined how £50 billion of customers' money should be spent, so we consider that a certain amount of complexity was justifiable. So the question is, was PR19 very complex or too complex?

The feedback we received from stakeholders was broad but centred around a general sense that the price review has become very complex. Some focussed on particular aspects, such as outcomes or the number of reconciliation mechanisms, and others suggested incremental or substantive changes to reduce complexity. Still others recognised that while the price review has become complex, simplification would come at a cost in reduced scope or effectiveness.

We consider that simplification is not an end in itself. Where the price review could be made less complex without sacrificing effectiveness it should be embraced as a means of delivering more for less. But where we risk losing the benefits brought by a sophisticated price review approach through simplification, we should weigh the benefits against the costs. We should also consider how future requirements may influence price review design. The impact of the data revolution is a good example of this. On the face of it, the creation and use of more and more data in the price review would make it more complex. But as the tools and approaches evolve, using data will become easier and more effective – in the same way that search engines make the vast informational treasure trove of the internet more easily navigable than the comparatively limited knowledge of a paper and ink encyclopaedia. Thus, as the data revolution progresses, we expect the costs of complexity to be lowered, and potentially the benefits to be increased.

To move the complexity debate forward, we build on this feedback in this section to consider the heart of the complexity issue – the sophistication versus simplification trade off. We also share, but do not assess, a range of approaches to simplification including incremental to more substantive changes to the price review. We explore:

- what drives complexity;
- what the benefits of the added complexity are;
- what the advantages of simplification are; and
- ways of simplifying the price review.

**Lessons learnt**

- The issue of complexity in PR19 was a key concern for stakeholders.

## 13.1 Drivers of complexity

We consider there are a number of drivers of complexity in the price review:

- the increased scope of the price review;
- the increased disaggregation of price review mechanisms and incentives;
- the approach to evidence, models and data to support the price review;
- the extent of tailoring to company specific circumstances; and
- transparency, engagement and consultation with stakeholders.

We briefly consider the drivers of complexity arising under each of these in turn below.

### 13.1.1 Scope of the price review

The growing breadth of coverage of the price review is a key driver of the level of complexity. Recent price reviews have expanded their coverage in response to increasing expectations to cover:

- quality of customer service;
- asset health, environmental performance and operational resilience;
- corporate and financial resilience;
- innovation;
- support for vulnerable customers;
- promotion of markets in line with the relevant Welsh and UK government policies;
- transparency of dividend and executive remuneration policies; and
- development of strategic water resources.

### 13.1.2 Disaggregation of price review mechanisms and incentives

The level of disaggregation across the price review impacts on complexity. For example, the more different aspects of service are separated out in performance commitments, other things being equal, the greater the complexity. Disaggregation has increased in:

- the number and types of price controls;
- the number of parts of the regulatory capital value;
- the number and types of performance commitments;
- the number and types of outcome deliver incentives; and
- the number and types of reconciliation and indexation mechanisms.

### 13.1.3 Approach to evidence, models and data to support business plans

In order for Ofwat to challenge, and for water companies to justify business plans more evidence and data requirements have been necessary, which can increase complexity. In PR19 this included the approach to:

- cost assessment including level of disaggregation of cost models, the bespoke approach to different aspects of cost assessment, use of top down and bottom up cost models;
- financial model;
- inflation indexation, including the transition from RPI to CPIH;
- the data required to support business plans; and
- the assessment of evidence required to support business plans.

### 13.1.4 Extent of tailoring to company specific circumstances

Each company may have particular circumstances which need to be reflected in its final determination, such as adjustments to cost allowances. The number of bespoke performance commitments and the differences across companies also adds to the complexity of the price review. A standardised approach is simpler to implement and communicate, but may risk not adequately reflecting the relevant differences in a water company's area. The greater the degree to which company specific circumstances are reflected, the greater the complexity of the price review when considered across England and Wales.

### 13.1.5 Transparency, engagement and consultation with stakeholders

The level of process around the price review, such as the scope for consultation on issues, the opportunities to make representations and the level of documentation explaining

reasoning may all increase the complexity or perceived complexity of the process. For example, slow-track and significant-scrutiny companies had at least three rounds of engagement with Ofwat, submitting their business plan, their revised business plan following IAP feedback and representations on draft determinations.

We note that the number and size of documents, spreadsheets and models published as part of the price review is a poor measure of its complexity. Price reviews now have more documentation as a result of increased transparency, driven by the increased emphasis on regulators demonstrating that their decisions are robust and evidence based.

## 13.2 Balancing simplicity with the benefits of complexity to customers, the environment and society

The complexities defined above have resulted from elements being introduced to the price review to deliver specific benefits. Increasing the sophistication of the price review may increase the benefits of the price review for customers, the environment and society. The direct costs of the price review are modest relative to the size of the sector, with each price review responsible for a £50 billion financial decision and the quality and resilience of water services impacting on the daily lives of everyone. Relatively small improvements in the outcomes for customers resulting from increased complexity of the price review can have substantial benefits – a 1% increase in efficiency is worth about £500 million, therefore increasing complexity to drive better outcomes for customers and the environment can have huge pay offs. The introduction of separate incentives in PR09 and then price controls in PR14 for retail activities is a good example where introducing extra elements in the price review increased company focus, which has led to improved efficiency and service.

Similarly, reducing regulatory complexity could have significant costs, if it damaged or impaired incentives for efficiency. It could also change the balance of risk and return – for example uncertainty mechanisms add complexity, but create more appropriate risk allocation, such as for uncertain expenditure under WINEP.

This compares to the direct cost of delivering PR19, which is estimated to be around £16 million per year over the two year delivery period for Ofwat, and upward of £2 million for each water company.[33] This suggests that increasing complexity or sophistication could have greater benefits than costs. Reducing complexity could therefore harm customers where a benefit of that complexity has to be foregone.

The development of big data and data science is lowering the cost of data processing and calculation over time. This reduces the cost of analysing data and offers new opportunities to reduce the cost of complexity of the price review.

[33] Estimated by Portsmouth Water.

**Lessons learnt**

- The complexity of the price review has increased in some areas to drive better outcomes for customers, the environment and society through increasing the scope of protections, increasing the accuracy and robustness of the price review, better identifying what customers want and by better allocating risk. It has also been reduced in some respects.

## 13.3 The benefits of simplifying the price review

The price review has become more complex in part to deliver greater benefits. But this added complexity comes with costs. In this section we explore the advantages of simplifying the price review for each complexity driver identified above.

### 13.3.1 Reducing the scope of the price review

Reducing complexity by reducing the scope of the price review and/or number of mechanisms and incentives could reduce the burden on water companies and our efforts in reviewing business plans. As noted by two water companies, this could allow more space in the timetable for water companies to respond to issues raised in early assessments or draft determinations, or could enable a shorter timetable and reduce the volume of documentation needed.

Moving elements that do not require a strong link to other parts of the price review to business-as-usual regulation could help focus the price review without sacrificing our objectives. The work would still need to be done by Ofwat and water companies – but would be taken out of the pressurised price review timetable.

### 13.3.2 Reducing disaggregation

There are several areas where reducing disaggregation may have benefits. Simplifying the outcomes framework by standardising or reducing the number of outcomes would enable us to focus on making those performance commitments and outcome delivery incentives that are included as effective as they can be. This would also make the process of setting outcomes and reconciling them more manageable, as this was one of the largest tasks Ofwat needed to undertake in PR19. This would need to be balanced against removing direct incentives on some outcomes that are beneficial to customers.

More generally, having fewer incentives could increase the focus on and impact of those that remain. We have already removed some elements that created complexity from previous

price reviews where we did not consider that they added sufficient value – we did not include totex menus in PR19, and one company noted that the move to a total revenue control at PR14 was a welcome simplification.

### 13.3.3 Reducing evidence and data requirements

If the scope of the price review is reduced, this would reduce the evidence requirements for business plans. However, in general we do not consider that our evidence requirements in PR19 were disproportionate. We therefore would need to carefully consider whether the remaining evidence requirements could be reduced without detriment to the quality of our decisions.

Data requirements are discussed in more detail in chapter 11: Data tables and financial modelling. There may be some scope for simplification in data collection through reducing the number of items collected, or by improving the efficiency with which data is collected through, for example, improvements to our data capture systems. There is also a timing element to this – getting data definitions and requirements agreed early in PR24 would free up resources in Ofwat and the sector to focus on policy issues later in the process. However, we consider that simplification in this area is likely to be mostly driven by process improvements, rather than reductions to data requirements. Even where more data was collected than directly employed, for example in cost assessment, this data improved our understanding and thus the robustness of our assessment. So it may be proportionate to continue to collect this data in future.

### 13.3.4 Maintaining a proportionate approach to tailoring to company specific circumstances

Several water companies commented that as we applied the same regulatory approach to all water companies in PR19, the smaller ones were disproportionately affected by complexity. One water company commented that they had talked to one in twenty of their customers and they considered that the cost of this engagement seemed disproportionate. They suggested that simplification of the approach on some aspects of the price review, for example on DPC and resilience, could make the process more proportionate. We note that we already have different approaches to different water companies where appropriate – small new entrant water companies (NAVs) have a different regulatory regime, to ensure their customers are no worse off than they would be if served by the water company they replace.

We do not consider that the level of protection for customers should be dictated by which company serves them. We therefore consider that this is most appropriately managed by ensuring that the materiality for customers of aspects of the framework is taken into account when applying it to different water companies.

### 13.3.5 Enabling effective engagement

We heard from stakeholders that making parts of the price review simpler, or reducing the number of rounds of submission of information or scope of documentation, may enable more stakeholders to effectively engage. Being able to clearly communicate our price review approach and outcomes also increases its legitimacy. However, there are limits to what simplification can achieve here; there will always be elements of price reviews that are too technical to be easily understood by a lay person, or indeed some of our stakeholders. For example it is not necessary, and we would not expect, for most people to understand the inner workings of the cost of capital. It is certainly the case that in PR19 we received challenge both from companies and other stakeholders even on technical areas.

**Lessons learnt**

- Simplifying the price review could reduce the burden on Ofwat and stakeholders and enhance the ability of stakeholders to engage. But the trade-off between simplification and the impacts on customers and the environment will need to be carefully evaluated.

## 13.4 Approaches to simplification of the price review

As there are different drivers of complexity, so too are there a variety of ways to simplify it, each with its own costs and benefits. These sit on a spectrum between incremental and more fundamental change. Whatever approach is taken, the driver for change should not be simplification as an end goal itself. Complexity is one aspect of price review design that should be taken account of as part of the overall goal of achieving the best outcomes for customers, the environment and society.

We have heard many of these suggestions through discussions on PR19 lessons learnt. We are sharing this (non-exhaustive) list here to broaden the horizons of what could be considered for PR24. We leave open the question of which of these might/could be taken forward for PR24.

### 13.4.1 Reduce the scope of the price review

The price review currently includes a number of elements that are not ‘core’ to setting price limits. We may still want to do most, if not all, of these things but they could be delivered outside of the price review. However, we could potentially remove some of the following elements from the price review:

- assessment of companies’ approach to addressing vulnerability;
- executive pay policy;

- dividend policy;
- innovation culture assessment; and/or
- assessment of some large enhancement projects.

We would need to consider how to ensure we can still effectively protect customers when considering these issues outside of the price review. For example, assessing large enhancement projects separately could enable a longer term approach to considering these projects, as noted by some stakeholders in Wales. But funding for these projects would still impact on short term bills and hence affordability – and so we would need to ensure there was a strong link between the price review and the project assessment process.

### 13.4.2 Simplify price review components

Regardless of how much is taken outside of the price review, a number of components will remain. There is potential to simplify the overall price review by simplifying any or all of the remaining components. The following elements have potential for simplification.

- Set **windows/tramlines** for more variables in advance within which we would accept proposals automatically. This would simplify the assessment process by enabling light touch assessments.
- Use a single measure of inflation.
- Make more use of **sector level customer engagement and research** to reduce bespoke water company research (see chapter 5: Customer engagement and 'PR24 and beyond: Reflecting customer preferences in future price reviews – a discussion paper'.
- Reduce the number or increase standardisation of **performance commitments and outcome delivery incentives** (see chapter 6: Outcomes).
- Reduce the number of **price controls**, which could require a licence change (see chapter 9: Targeted controls).
- Reducing the number of **reconciliation mechanisms and models** for PR24, e.g. through allocating greater risk to water companies (see chapter 10: Past delivery).
- Simplify **data requirements and/or financial model** (see chapter 11: Data tables and financial modelling);
- Reduce the **volume of material** published where this can be achieved without reducing clarity and evidence for our decisions (see chapter 14: Programme management).

### 13.4.3 Simplify price review process

The price review process could be simplified independently of any price control component simplification. The following process simplification options could be considered.

- **Increase the scope of 'early certainty'** awarded to fast-tracked business plans so that the assessment of these plans is simplified.

- **Remove one stage of resubmission of business plans** from the process. However this could reduce the quality of draft determinations and the procedural benefits of fast-track status.
- **Remove one or more stage of resubmission of reconciliation data** from the process. This would need to be balanced against the checks required to ensure the accuracy of reconciliations.
- **Remove or simplify the IAP by reducing its scope.** Removing the IAP would probably not simplify the process much as we would likely need to revert to having 'draft' and 'final' business plan submissions.
- **Separate the price review submission from business plans.** One company suggested that the price review submission could be more technical and simpler. But as this would require water companies to have a separate 'strategic plan' it is not clear that this would simplify the overall regulatory process.

## Lessons learnt

- There are many approaches to simplification; we should consider a range of options for simplifying future price reviews that do not sacrifice the benefits of sophistication – as simplification is not an end in itself.

## Next steps

- We will review complexity in PR19 and consider how to include simplification as part of the options appraisal framework for PR24 and beyond.
- Our emerging data strategy will consider how data, analytics and data science can be used to reduce the burden relating to volume and analysis of data, while also improving the accuracy and power of the price review.

# 14. Programme management

Delivering PR19 required extensive engagement, detailed planning and significant resources from water companies, Ofwat and other stakeholders and the implementation of effective review, assurance and governance processes. In this chapter we discuss the feedback received relating to some key elements of the management of the PR19 programme.

## 14.1 Timetable

In 'Towards Water 2020 - meeting the challenges for water and wastewater services in England and Wales', July 2015, we published a provisional work programme for PR19. We invited stakeholders' views on whether this represented an appropriate timescale for the delivery phase of PR19 or whether they thought there were better alternatives for reducing time pressures and providing more scope for engagement with customers. Following a review of responses, in 'Water 2020: Regulatory framework for wholesale markets and the 2019 price review', December 2015, we consulted on an indicative timetable for the Water 2020 programme that included the 2019 price review process. Our review of consultation responses helped shape the timeline included in our decision document 'Water 2020: Our regulatory approach for water and wastewater service in England and Wales', May 2016. This provided early confirmation that business plans were to be submitted on 3 September 2018. We consulted on the draft methodology in 'Delivering Water 2020: Consulting on our methodology for the 2019 price review', July 2017. In 'Delivering Water 2020: Our final methodology for the 2019 price review', December 2017, we provided key milestones in the PR19 process that were based on the indicative milestones we had included in earlier consultations.

We heard consistently that the process was much better than in PR14 in terms of clarity of what was happening and when. Companies welcomed early sight of the timetable and that Ofwat delivered in line with it, which helped them to plan much more effectively. Several companies commented that the early submission of some elements of business plans achieved a very difficult balance between screening issues for further exploration without reducing the coherence of plans as a whole.

Our intention is to provide an indicative timeline for PR24 in **May 2021**. We appreciate that this is later in the five year cycle than for PR19, but consider this provides appropriate notice. This is a consequence of us delaying the development of our thinking around the design of PR24 following impact of Covid-19 and the volume of work associated with four water companies' final determinations being referred to the CMA. In order to set out the timetable for PR24 we need to have a clear idea about the overall price review design – for example, whether there will be an equivalent to the IAP – as this will drive the timetable. We will work with the sector to ensure that the timetable for PR24 is practical and effective given these circumstances.

We are working with the Environment Agency and Natural Resources Wales to ensure effective integration between the WRMP, including the regional planning process, the river basin management plans (RBMP), the WINEP, the NEP, the drainage and wastewater management plans (DWMP) and the price review processes. Continuing to build strong partnerships with other regulators, consumer bodies and policy makers in the UK and Welsh Governments to drive more coherence in the regulatory approach is one of our ambitions for 2020-21 that underpins our strategy 'Time to act, together'.

Although clarity on the process was appreciated, many companies felt the process was demanding and that consultations and other periods requiring input from water companies often occurred during or over holiday periods.

It was also felt that 6 weeks to respond to the draft determination over the summer period in 2019 was particularly challenging, given the need to review all the published documentation and obtain internal assurance on the significant decisions that needed to be made in response to the draft determinations. Several companies considered that it would be beneficial to extend this consultation period, even by a small amount.

Some water companies also commented that changes to the approach to setting some elements of the price review following consultation added to the regulatory burden and reduced the effectiveness of some policy, as they needed to keep abreast of updates. Other companies supported changes being made to improve the outcomes of the price review for example around developer services.

We appreciate the efforts made by and contributions of stakeholders to PR19. We understand both the importance of the process to customers and stakeholders and the importance of transparent and rigorous decision making require commitment from all involved in the process. We will reflect on the opportunities to structure and streamline the process, including the level of consultation, to ensure there is sufficient opportunity to hear views and gather evidence without creating an undue burden on stakeholders. We note that because of the learning generated by consultation, it is likely to be desirable to change some aspects of our approach to the price review during the process; we do not think it is reasonable to continue to follow approaches which are not effective simply for the sake of stability.

We value stakeholders' contributions and responses to consultations during the process. We will consider how to maximise the effectiveness of consultations as part of the design of PR24, striking an appropriate balance between providing opportunities to share evidence and views without creating an unduly lengthy process.

We consider that the evolution of policy to respond to new information, changes in the broader environment and to where issues are identified with the methodology is a natural part of the process. Our objective is to minimise changes as far as possible, but to respond flexibly where necessary. We consider that we struck the right balance in this regard for PR19.

### Lessons learnt

- Providing early clarity on the timetable and delivering to the timetable enabled the price review process to work well for Ofwat and stakeholders.
- We should consider how to structure and streamline the price review process to enable effective engagement and consultation by stakeholders without creating an unduly burdensome or lengthy process.

## 14.2 Documentation

Our commitment to operate an open and transparent price review process meant we produced a significant number of documents, supporting analyses and models to explain the rationale behind our decisions and interventions.

Overall we received very positive feedback from companies and other stakeholders that our documentation was high quality, well structured, clear, and delivered on time. Several documents were pulled out as being particularly helpful: our final methodology was considered detailed and comprehensive, and the IAP pro formas and initial assessment actions and interventions trackers helped companies to prioritise and focus their efforts.

However, most companies also commented that the large volume of documentation created significant challenges in assessing it all. Counter to this, a few companies said that they wanted to see more evidence to support decisions in some areas that had a material impact on them. We also heard that it would have been better if our feedback had all been in one place, rather than spread across documents.

We consider that maintaining a high level of transparency in our decisions is important. We think that PR19 succeeded in providing an appropriate level of transparency – and this is reflected in the volume of documentation. But we also recognise that there is always room for improvement in the area of documentation and will look for ways to make our documentation more succinct and accessible for the next price review, where this can be achieved without diluting or removing evidence we consider is important to publish.

Some companies said they would have liked Ofwat to set out more clearly the information we expected companies to submit. They said they were sometimes not sure what Ofwat wanted and were frustrated that they submitted a lot of information which they did not necessarily feel was being used by Ofwat. Some CCG chairs said they would have liked Ofwat to provide either a template for the CCG report, or more guidance on its structure, content and how it would be used.

We consider there is a trade-off between efficiency and enabling companies to have ownership of their business plans. However, we also recognise that greater clarity in the

guidance on the evidence we require can help both companies and Ofwat reach the best outcomes for customers and do so more efficiently. We will consider how we can do this in future, for example by standardising elements of the business plans and/or providing an ongoing live summary or checklist of all the key requirements with links to our latest guidance.

### Lessons learnt

- Our documentation was considered to be high quality and timely; however it was significant in volume. We should take steps to consolidate and focus our documentation as appropriate, to ensure that the rationale for our decisions are proportionate to the materiality of our interventions.
- Companies sought greater clarity around submission requirements; we will consider how best to provide this for PR24, taking account of the importance of company ownership of plans.

## 14.3 IT systems

It is crucial for our IT systems to effectively meet the demands of the price review, both for managing data and to support analysis and document production. Technological development offers new opportunities to assess, present and harness data.

At the time of issuing our final methodology, we had hoped to develop a portal that would have enabled companies to input business plan data directly and securely into our in-house database. But unfortunately we were unable to complete this within the timeframe without introducing unnecessary complexity and risk to the process. Instead, we granted permissions to users nominated by each company to upload business plan files to designated areas within our secure data capture system in SharePoint.

We received limited feedback on our IT systems. Two companies said they thought our SharePoint transfer system had worked well and was better than the PR14 approach.

We found the secure data capture system was reliable for uploading files. However, our intention for PR19 was to move away from using Excel templates to capture companies' data. We learnt from previous price reviews that creating these templates and managing subsequent revisions, was and remains a resource intensive task for all involved (see chapter 11: Data tables and financial modelling). Excel also has limited validation, automation, version-control and assurance capabilities. Looking ahead to PR24, we are also considering whether we can make better use of data by using alternative analysis tools, which could be integrated with our data capture tools. We will therefore investigate alternatives to Excel for data capture and analysis to improve efficiency, reliability and robustness.

### Lessons learnt

- The SharePoint secure data capture system worked well but has limited capabilities. We should investigate alternatives to Excel for data capture and analysis to improve efficiency, data assurance and automation.

## 14.4 Delivery partner support

Delivering a price review is a resource intensive process. Currently, the price review follows a five year cycle with peaks and troughs in resource needs. In PR14 we used a delivery partner to support the process. The delivery partner was a consortium of consultancy firms able to provide engineering, economic and finance expertise on a flexible basis. The use of a delivery partner allowed us to effectively supplement our resources with specialist skills to meet base and peak demand. For PR19, we adopted a similar delivery model and, following competitive tendering, appointed a delivery partner to work within our teams across both our Birmingham and London offices. Delivery partner staff were integrated into Ofwat price review teams and were lead and managed by Ofwat staff. The delivery partner was used to provide highly flexible resource capacity which was flexed up and down during the process and access to highly specialist engineering, economics and finance expertise. Alongside the delivery partner, Ofwat also engaged a number of fixed term contract staff to provide additional support for the delivery phase of the price review.

Our delivery partner told us that overall, PR19 was a positive experience for them. They considered that PR19 was a good example of effective partnership working where staff worked well as one team.

We consider that the delivery partner provided important flexibility of resourcing and expertise, allowing Ofwat to adjust to both changing demand for the level and type of resources needed during the process. We will consider the need for external support for PR24 at the appropriate time and seek to build on the successful use of the delivery partner in PR19.

## Lessons learnt

- The delivery partner provided valuable expertise and flexible resourcing to meet varying demands during the delivery process.

## Next steps

- Ofwat aims to provide an indicative PR24 timeline in May 2021.
- We will continue to engage with other sector regulators to ensure the most effective alignment of the price review with other regulatory planning processes including WRMP, RBMP, WINEP, NEP and DWMP is achieved.
- Ofwat should continue to provide transparent and high quality documentation and consider the steps it can take to make documentation more succinct and focussed.
- Ofwat will consider what external support it might need for PR24 and the benefits of the delivery partner model and insights from success deployment of the model in PR24.

**Ofwat (The Water Services Regulation Authority) is a non-ministerial government department. We regulate the water sector in England and Wales.**

Ofwat
Centre City Tower
7 Hill Street
Birmingham B5 4UA

**Phone:** 0121 644 7500
**Fax:** 0121 644 7533



This document is also available from our website at www.ofwat.gov.uk.

Any enquiries regarding this publication should be sent to mailbox@ofwat.gov.uk.

OGL