January 2019

Trust in water

PR19 initial assessment of plans: Summary of test area assessment

Ofwat

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1 Executive summary

In ‘PR19 initial assessment of plans: Overview of company categorisation’, we set out our key decisions on the categorisation of the water companies’ business plans for the 2019 price review (PR19). PR19 will set the price, service and incentive package for water companies for the period 2020-25. This document sets out a summary of our assessment for each test area of our initial assessment of plans.

In the PR19 methodology, we challenged water companies to create business plans to stretch themselves to deliver more of what matters for their customers, the environment and wider society. Overall, we have seen a considerable step up in the ambition across the sector. Compared to our previous price review, some companies have challenged themselves on costs and bill affordability. We have also seen a significant step up in customer engagement and support for customers in vulnerable circumstances. Some companies have made good progress on resilience and innovation. More progress is needed in these areas so that the industry is well prepared for the challenges that will arise from climate change and population growth.

Three companies – South West Water, United Utilities and Severn Trent Water – produce overall high-quality business plans. These companies are categorised as ‘fast track’, and will receive early draft determinations of their price, service and incentive package for 2020-25, a financial benefit and a boost to their reputation. In key areas where these plans fall short, these companies have accepted some limited interventions to protect customer interests.

Ten company plans are categorised as slow-track. These companies will need to revise and resubmit their plans by 1 April to better demonstrate they deliver for customers. Four plans need significantly more work to align to customer interest. They are in the ‘significant scrutiny’ category. These companies will need to substantially revise their business plans by 1 April.

We have not used a fourth category to grade business plans – “exceptional”, as no plans meet the very high standards of this category by going sufficiently above and beyond the criteria for fast-track.

Figure 1.1: Company categorisations

Fast track	Severn Trent South West United Utilities	Plans ready to implement. Receive financial benefit, early decisions and early certainty.
Slow track	Anglian Dŵr Cymru Northumbrian Wessex Yorkshire Bristol Portsmouth South East South Staffs SES	Further work to do on plans.
Significant scrutiny	Affinity Hafren Dyfrdwy Southern Thames	Substantially rework and resubmit plans. Increased regulatory scrutiny.

To make this initial assessment of business plans we examined the business plans through the lens of nine test areas. We then carried out an ‘in-the-round’ categorisation of the business plans. This was based on their performance in these test areas and the overall level of intervention needed to protect customers. The remainder of this executive summary shows the test area grades for all companies, and summarises the themes that emerged from our assessment in each test area.

1.1 Test area grades

Test area grades range from A to D – A being the highest and D the lowest. We give a grade A when a company shows high quality, ambition and innovation across the test area. We give a grade B when the company provides an overall high-quality plan and meets our stretching expectations. Grades C and D are when plans fall short. Grade A is not possible for ‘aligning risk and return’ and ‘accounting for past delivery’ test areas as these test areas are compliance based.

Figure 1.2: Test area grades by company

Test Area	Water and sewerage companies											Water only companies					
	Anglian Water	Dŵr Cymru	Hafren Dyfrdwy	Northumbrian Water	Severn Trent Water	South West Water	Southern Water	Thames Water	United Utilities Water	Wessex Water	Yorkshire Water	Affinity Water	Bristol Water	Portsmouth Water	South East Water	South Staffs Water	SES Water
Engaging customers	A	B	C	B	B	B	C	C	B	B	B	C	B	C	C	B	C
Addressing affordability and vulnerability	B	B	D	B	B	B	B	C	A	B	C	C	C	C	B	C	B
Delivering outcomes for customers	B	C	D	C	C	B	C	C	C	C	C	C	C	C	B	C	C
Securing long-term resilience	C	C	D	C	C	B	D	D	B	C	C	D	C	C	C	D	C
Targeted controls, markets and Innovation	B	C	C	C	C	C	C	C	B	B	B	C	C	C	B	C	C
Securing cost efficiency	D	D	B	C	B	B	D	D	B	C	C	C	C	B	C	C	D
Aligning risk and return	C	C	D	B	C	B	C	C	C	D	C	D	C	C	C	C	C
Accounting for past delivery	B	C	D	C	B	D	D	D	B	B	B	C	D	C	D	B	B
Securing confidence and assurance	D	A	C	C	B	C	C	C	B	C	C	C	C	C	B	C	D

1.2 Key findings for the nine test areas

1.2.1 Engaging customers

Great customer service starts with an in-depth understanding of customers' preferences and priorities. We assess how well the business plans show this understanding in the 'engaging customers' test area.

Performance in this area is good, and all companies provide evidence to show they have adopted our principles of good customer engagement. Companies made more use of research and used a range of techniques to identify customer preferences to inform their business plans.

Ten companies provide enough convincing evidence to be high quality. Anglian Water goes further and demonstrates that it has been ambitious and innovative in its approach to 'engaging customers' – for example, using innovative multi-stage 'willingness to pay' research. Companies' plans that fall short of high quality often lack evidence of a high quality approach to application and use of research methods and how they took their customers' views into account in their business plans.

We welcome the contribution that customer challenge groups (CCGs) have made to providing independent assurance of the quality of engagement between companies and customers. We see that the quality of customer engagement is improved as a result of the CCG's independent challenges to their water company.

1.2.2 Addressing affordability and vulnerability

Customers should feel confidence that they will receive affordable services and value for money, now and in the long term. In the 'addressing affordability and vulnerability' test area, we assess how well the business plans demonstrate that bills will be affordable over 2020-25, and in the long term. We also assess the assistance available to people struggling to pay and in vulnerable circumstances.

Performance in this test area is good. United Utilities provides a particularly ambitious and innovative plan. Ten companies provide enough convincing evidence to be high quality. These companies give evidence of initiatives that will positively impact customers, including:

- bills that are falling in real terms;
- significant increases in the number of customers who will be helped by affordability support schemes; and
- an increase in the number of customers getting, and satisfied with, priority services (services for customers in need).

Companies that fall short of high quality do not provide evidence that their plans will have a positive impact on customers. Poor practice includes companies:

- not giving enough evidence to show that customers think companies' bill proposals are acceptable or affordable; and
- not challenging themselves enough to increase the number of customers receiving affordability support or priority services.

1.2.3 Delivering outcomes for customers

We aim to incentivise companies to focus on delivering the high-level objectives that matter to today's customers, future customers and the environment. In the 'delivering outcomes for customers' test area, we assess whether companies have the right incentives to deliver for customers.

Companies have stepped up their performance in this area. Three companies meet our stretching requirements overall: Anglian Water, South West Water and South East Water. We find several issues with most other companies' proposals, including:

- how they define outcomes for customers;
- the way they measure performance;
- the proposed levels of performance; and
- the incentive payments for outperformance or underperformance.

1.2.4 Securing long-term resilience

Operational, corporate and financial resilience of the water sector is critical to customers. Resilience is a key part of both the UK Government and Welsh Government strategic policy statements for Ofwat, and a key part of our assessment.

We consider companies' evidence of long-term resilience in the round for the 'securing long-term resilience' test area. Performance in this test area falls short of our expectation with only two companies – South West Water and United Utilities – making good progress.

Companies that do well provide good evidence on risk assessment and mitigations. Companies that fall short of high quality do not provide enough evidence:

- that they have a systems-based approach to resilience;
- that they prioritise risks appropriately;
- that they have taken environmental resilience and natural capital into account in decision making; and
- about some core elements of operational, corporate or financial resilience.

Some water companies do not provide a clear line of sight from prioritised risks to mitigations and improved outcomes for customers.

1.2.5 Targeted controls, markets and innovation

An innovative culture, using and facilitating markets and procuring the right services in the right way allows companies to achieve the best service and/or price. We assess how well the business plans address these issues in the 'targeted controls, markets and innovation' test area.

Performance here is mixed. United Utilities, Yorkshire Water, Anglian Water, South East Water and Wessex Water have plans that are high quality across much of this test area, although not the full breadth. These companies provide high-quality plans that include, for example:

- evidence to show a culture that supports innovation;
- a cohesive water resources strategy; or
- a plan that supports markets through, for example, effective bid assessment frameworks or well-evidenced 'direct procurement for customer' schemes.

The remaining companies do not provide enough convincing evidence across this test area, so they fell short of the high-quality bar we set.

1.2.6 Securing cost efficiency

In the 'securing cost efficiency' test area, we scrutinise the efficiency of companies' projected costs for 2020 to 2025. This is to make sure customers do not pay more because of companies' inefficiency.

Performance in the test area is varied. Severn Trent Water, Hafren Dyfrdwy, South West Water, United Utilities and Portsmouth Water stretch themselves and put

forward efficient proposals for ongoing expenditure. However, several companies still lag behind efficient benchmarks for ongoing and enhancement expenditure, which is largely capital expenditure to improve capacity or service. So we are challenging these companies to catch up.

Many companies do not give enough convincing evidence to show that all their proposed enhancement costs are in customers' interests.

1.2.7 Aligning risk and return

For the 'aligning risk and return' test area, we look at how well business plans balance the interests of companies and investors with those of customers.

Performance in this area varies across the different aspects of the test. Northumbrian Water and South West Water present high-quality plans in this area overall. Where companies do well, they:

- accept our early view of the cost of capital;
- provide enough convincing evidence that the plan was financeable; and
- include pay-as-you-go (PAYG) and regulatory capital value (RCV) run-off rates that appropriately balance the impact on customers and the company, now and in the future.

Thirteen companies provide high-quality plans in relation to the cost of capital. Twelve accepted our early view, and one (Portsmouth Water) give enough convincing evidence for a higher cost of capital supported by customers and wider benefits.

Where companies did less well, they did not give enough evidence to support their:

- proposed cost of capital;
- PAYG and RCV run-off rates;
- financeability assessment; or
- assessment of the impacts of risks to their return on regulatory equity.

1.2.8 Accounting for past delivery

For the 'accounting for past delivery' test area, we look at both:

- the evidence on the deliverability of the plan by looking at past performance and the measures the company has put in place to improve performance; and
- the reconciliation of financial incentives from the 2014 price review to make sure customers only pay for the service they receive in 2015-20.

Seven companies have high-quality business plans in this test area. Companies that do well either showed good past performance or show that they understand why they had poor performance and put measures in place to deliver their 2020-25 plans.

Companies that fall short of high quality do not provide enough convincing evidence that their plans:

- address issues with current performance; and
- will deliver the proposed level of stretch between current and projected performance in their plan.

1.2.9 Securing confidence and assurance

It is vital that customers and stakeholders, including Ofwat, have confidence in companies' business plans and their quality.

For the 'securing confidence and assurance' test area, we consider:

- the board assurance of the plan;
- data quality and consistency; and
- whether the company meets the requirements of our 'Putting the sector in balance' document to improve how they reflect customers' interests when deciding on financial structures, dividend policy and executive pay.

Three companies – Severn Trent Water, United Utilities and South East Water – put forward high-quality submissions. One company – Dŵr Cymru – put forward a submission that is not only high-quality, but also ambitious and innovative. It provides an ambitious voluntary sharing mechanism as well as largely meeting our expectations in the 'Putting the sector in balance' document, as well as providing the requested board assurance statements across its business plan, with appropriate supporting evidence. The sector has stepped up compared to the 2014 price review, and generally provides high-quality and consistent, accurate and assured business plan data tables.

The provision of high-quality board assurance is mixed. The vast majority of companies provide some important assurance statements – for example, that

business plans are high quality and deliverable, and have been informed by customer engagement. However some statements are not provided, or not provided in full.

On providing a fair balance between customers and investors', all companies make steps towards meeting our expectations as set out in the Putting the sector in balance position statement. Several companies provide high-quality voluntary benefit sharing with customers. All business plans meet our expectation that nominal base dividend yields will not exceed 5%. However, some companies do not accept our mechanism for sharing the benefits of high gearing with customers (despite high gearing). No company fully meets our expectations on executive pay or dividend policies. We are going back to all companies to ask them to revise their proposals.

2 Introduction

2.1 The 2019 price review

In a price review, water companies, together with their customers, create plans for the future. We set the framework for these plans and scrutinise and challenge them to make sure they meet customers' needs and companies' obligations. Based on these plans and our interventions, we set the five-year price, service and incentive packages for each water company.

The 2019 price review sets the price, service and incentive package for the period 2020-25, and is made up of the following four phases.

1. The initial assessment of business plans and categorisation of plans.
2. The early draft determinations for 'fast-track' companies.
3. The draft determinations for the other companies.
4. The final determinations.

In this document, we have set out more details of our initial assessment of companies' business plans.

2.2 Our initial assessment of business plans

Customers expect great service, at least comparable to the service they get elsewhere. They expect water and wastewater services to be resilient to both short-term shocks and long-term challenges, such as population growth and climate change. And they expect those services to be affordable for all, including those struggling to pay. The only way water companies will achieve all this, is to find new and better ways of delivering those services.

In our PR19 methodology, and our 'Putting the sector in balance' document, we set out a series of expectations and requirements for water company business plans, so companies really stretch themselves to deliver more for their customers, the environment and wider society. These expectations and requirements reflect the four PR19 themes of great customer services, long-term resilience in the round, affordable bills and innovation; and the strategic policy statements of the UK and Welsh governments.

The initial assessment tests water company business plans against these high expectations. Where companies have not met our expectations, they need to resubmit their business plans. However, where companies have met these

expectations, they will receive early draft determinations and financial and reputational benefits.

Reflecting our four themes, we have assessed business plans against three overarching characteristics, high quality, ambition and innovation across nine test areas:

- engaging customers;
- addressing affordability and vulnerability;
- delivering outcomes for customers;
- securing long-term resilience;
- targeted controls, markets and innovation;
- securing cost efficiency;
- aligning risk and return;
- accounting for past delivery; and
- securing confidence and assurance.

Based on our assessment against our stretching expectations, we have placed companies' business plans into three categories out of a possible four.

Fast-track status is given to plans that are high quality and where limited, minor or no intervention is required to protect customers' interests. The threshold to be placed in the 'fast-track' category is high and the assessment is made in the round.

Slow-track status is given to plans where a level of material intervention is required to protect the interests of customers. We will require companies to resubmit their business plans and provide additional evidence.

Significant scrutiny status is given to plans that fall well short of the required quality and where extensive material intervention is required to protect the interests of customers. Our assessment takes into account both the number of areas of concern and the extent of the concerns.

We have not put any companies in the exceptional category. The bar for this category is set very high. While some companies meet that bar in some areas, no companies demonstrate enough ambition and innovation across the plan as a whole.

In this document we summarise the initial assessment of company business plans in each of the nine test areas.

This document is part of a suite of documents on the initial assessment of business plans. You can find more information in about our decisions in the following documents, which are on our website.

Overview of company categorisation
PR19 initial assessment of plans: Summary of test area assessment (this document) setting out our overall approach to the initial assessment of business plans and our key findings by test area, together with supporting documents. Technical appendix 1: Delivering outcomes for customers Technical appendix 2: Securing cost efficiency Supplementary technical appendix: Econometric approach Supplementary technical appendix: Europe Economics Frontier shift and real price effects Supplementary technical appendix: KPMG totex and outcomes report Technical appendix 3: Aligning risk and return Technical appendix 4: Company specific adjustments to the cost of capital Bid assessment framework information note
For each water company: **PR19 initial assessment of plans: company categorisation** setting out for our reasons for the category given to that company's business plan together with supporting documents (as required). Test area assessment Test question assessment Actions summary table Delivering outcomes for customers detailed actions Accounting for past delivery detailed actions Securing confidence and assurance detailed actions Direct procurement for customers detailed actions
Template company actions tracker Common Performance Commitment outline for the Priority Service Register PR19 initial assessment of plans: Glossary PR19 price setting models map PR19 initial assessment of business plans: Past performance models PR19 initial assessment of business plans: Cost assessment models

2.3 Structure of the rest of the document

Chapter 3 sets out our overall approach to the initial assessment of business plans. The rest of this document sets out the purpose, approach and key findings for each test area, structured as follows.

Chapter 4 covers ‘engaging customers’.
Chapter 5 covers ‘addressing affordability and vulnerability’.
Chapter 6 covers ‘delivering outcomes for customers’.
Chapter 7 covers ‘securing long-term resilience’.
Chapter 8 covers ‘targeted controls, markets and innovation’.
Chapter 9 covers ‘securing cost efficiency’.
Chapter 10 covers ‘aligning risk and return’.
Chapter 11 covers ‘accounting for past delivery’.
Chapter 12 covers ‘securing confidence and assurance’.

‘Annex 1: Common performance commitment on vulnerability’ sets out the full set of test questions we use in each test area to assess business plans.

‘Annex 2: Test areas and test questions’ sets out our proposal to introduce a reputational common performance commitment for vulnerability.

‘Annex 3: Cost tables’ includes cost tables with business plan totex relative to our view of efficient totex for each company.

3 Approach to the initial assessment of business plans

3.1 The purpose of the initial assessment

Companies need to be ambitious and innovative to push the boundaries on what they provide for customers, the environment and wider society – and to meet the challenges facing the sector. They must take full ownership of these challenges. And we expect them to produce high-quality, ambitious and innovative plans for 2020-25 to address them.

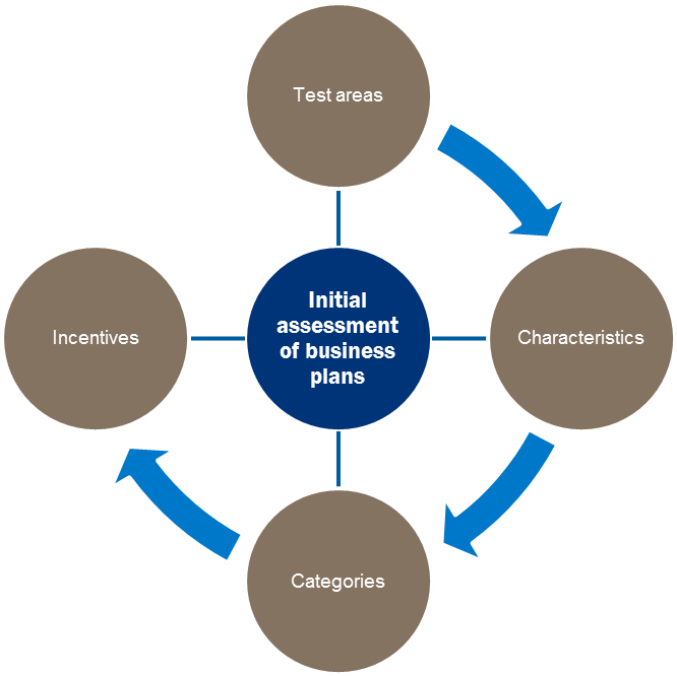
The initial assessment of business plans is the first step in our assessment of companies' business plans. It provides incentives for all companies to produce high-quality, ambitious and innovative plans, so the best companies can push the frontier for all companies. By providing financial, procedural and reputational incentives, it allows companies that submit the best plans to benefit – and aligns the interests of companies, investors and customers. What matters most to customers is the delivery of these plans. So the strongest incentives are associated with the successful delivery of business plans; for example, through outcome outperformance and underperformance payments, and through cost-sharing rates.

After the initial assessment, we will set out our draft and final determinations of the price service and incentive package for water companies for the period 2020-25.

As set out in the PR19 methodology, and shown in Figure 3.1, the initial assessment covers four key elements. The rest of this chapter provides more detail on our approach to the initial assessment, in particular:

- how we have done our assessment at a test question and **test area** level;
- the **characteristics** we are looking for;
- how the assessment has led to the overall **categorisation** of companies; and
- the **incentives** for companies available for each category of plans.

Figure 3.1: Key elements of our initial assessment of business plans



3.2 Test areas and test questions

In our PR19 methodology, we set out nine test areas reflecting our PR19 themes and the strategic policy statements of the UK and Welsh Governments. This was to help make sure companies deliver for customers, the environment and wider society. The test areas are:

- engaging customers;
- addressing affordability and vulnerability;
- delivering outcomes for customers;
- securing long-term resilience;
- targeted controls, markets and innovation;
- securing cost efficiency;
- aligning risk and return;
- accounting for past delivery; and
- securing confidence and assurance.

Across these nine test areas there are 33 test questions that give more detail of our expectations. ‘Annex 1: Common performance commitment on vulnerability’ sets out the full set of test questions in each test area.

Figure 3.2.: Example of test questions in a test area (delivering outcomes for customers)

Delivering outcomes for customers
1. How appropriate, well evidenced and stretching are the company's proposed performance commitments and service levels?
2. How appropriate and well evidenced is the company's package of ODIs?
3. How appropriate is the company's focus on service performance in its risk/return package?

3.3 Characteristics

In our PR19 methodology, we set out that we expected companies to demonstrate how their business plans meet three overarching characteristics:

1. **High quality.** The company's proposals will not only be efficient, resilient and affordable, but also include stretching performance commitments that really deliver for customers. We also noted that we expect to have a high degree of confidence that the business plan will be delivered. A high-quality business plan will also provide a focused and persuasive vision of the future, with clear evidence appropriately used and with well-set-out, robust reasoning to support the company's proposals.

2. **Ambition.** We set out that an ambitious business plan will push forward the efficiency and delivery frontier for the sector, setting a new standard for the future. We expect companies to be ambitious and innovative in their business plans and to aim to deliver value for their customers.

3. **Innovation.** Meaningful innovation leads to new benefits for customers, companies and the environment, and to better management of risks and opportunities. For a plan to be ambitious, it must be innovative – the two must go hand in hand. To expand the boundaries of efficiency and delivery in the sector, companies will need to work in more innovative ways.

In our PR19 methodology we provided extensive extra detail on these characteristics. This included high-level criteria of the potential features of high-quality, ambition and innovation for each test area. After a consultation with stakeholders, we updated our requirements, in our 'Putting the sector in balance' document, for what else companies should do to take customers' interests into account when determining financial structures, dividend policy and executive pay.

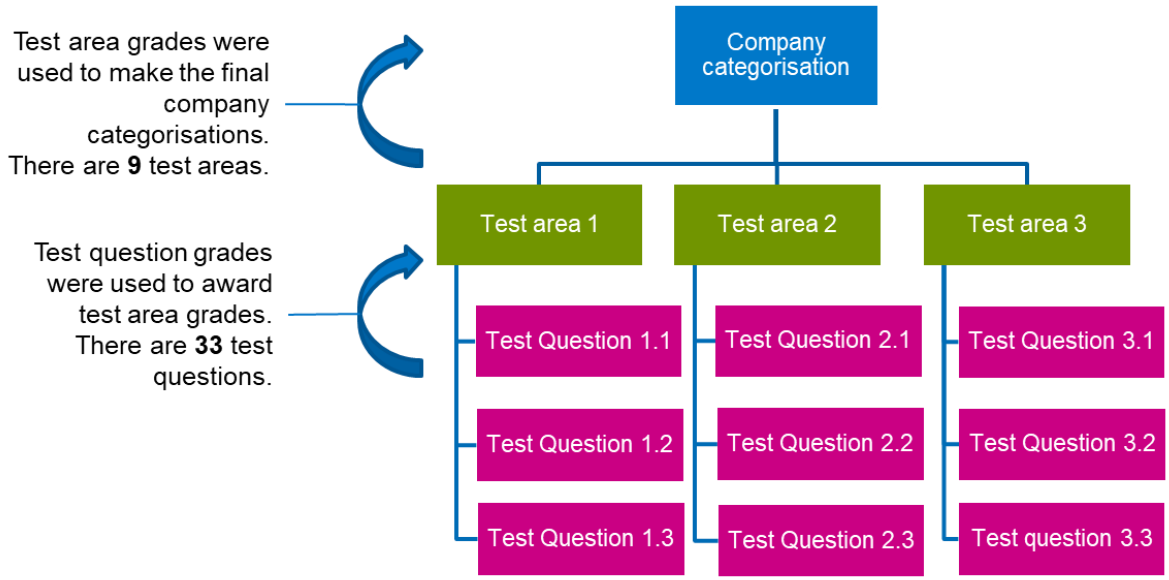
For each test question, and each test area, we have awarded companies one of four grades, as set out in Figure 3.3. Ambition and innovation is not appropriate in all test questions and test areas. It is not possible to be awarded a grade A in 'aligning risk and return' or 'accounting for past delivery', because the questions in those test areas are compliance based.

Figure 3.3: Grading of test questions and test areas

Grade	
A	High-quality, ambitious and innovative plan **with** evidence that overall is sufficient and convincing
B	High-quality plan, not sufficiently ambitious and innovative to be exceptional **with** evidence that overall is sufficient and convincing
C	**Concerns with the plan:** Plan falls short of high quality **and/or** evidence is insufficient and/or unconvincing in some areas
D	**Substantial concerns with the plan:** Plan falls significantly short of required quality **and/or** little or no evidence, or no convincing evidence

For all test areas, apart from 'engaging customers', there is more than one test question in the test area. For these test areas, we undertake an 'in the round' assessment to decide grades. We take into account each of the test question grades, but place greater emphasis on individual test questions where appropriate.

Figure 3.4: Illustration of how we decided test area grades and company business plan categories



There is more detail of the approach we use to decide on test area grades in the following chapters.

3.4 Overall categorisation of business plans

Companies' performances against the three characteristics – high quality, ambition and innovation – in each test area determines how we categorise their business plans. In the PR19 methodology, we set out four categories to reflect the quality, ambition and innovation of the plan.

Exceptional status – plans that are high quality with significant ambition and innovation for customers and that push the boundaries of the industry and set an example for others.

Our assessment of ambition and innovation is both absolute and takes relative aspects into account. We did not predetermine what level or kind of ambition or innovation would be sufficient to be assigned to the 'exceptional' category; as this would have reduced the incentive for companies to stretch themselves and innovate. In our PR19 methodology, we made it clear that we do not consider it necessary to give any companies 'exceptional' status, if none is deemed to have submitted a plan sufficiently ambitious and innovative.

Fast-track status – plans that are high quality and where limited, minor or no intervention is required to protect customers' interests, but which are not ambitious or innovative enough to attain 'exceptional' status. The threshold to be placed in the 'fast-track' category is high.

Slow-track status – plans where a level of material intervention is required to protect the interests of customers. Companies may be required to resubmit parts of their business plans or to provide additional evidence.

Significant scrutiny status – plans that fall well short of the required quality and where extensive material intervention is required to protect the interests of customers. Our assessment will take into account both the number of areas of concern and the extent of the concerns. This may include expecting companies to substantially rework these plans.

Based on our assessment at a test question and area level, we identify a set of actions that we require the company to do to protect customers and the environment. Actions include providing more evidence or clarification to substantiate part(s) of the business plan; or reworking and/or resubmitting part(s) of the business plan because it falls short of the required quality.

While many companies' business plans have elements of ambition and innovation, no business plans were sufficiently ambitious or innovative to be awarded 'exceptional' status and receive higher financial rewards.

Three companies – Severn Trent Water, South West Water and United Utilities – were close to meeting our stretching expectations across their business plans. Each of the companies has accepted the necessary interventions, and so we award fast track status to each of these companies.

We categorise four companies – Affinity Water, Hafren Dyfrdwy, Southern Water and Thames Water – as 'significant scrutiny' because they fall substantially short of the required quality. We categorise the remaining companies as 'slow track'.

We categorise actions that companies need to do as:

- **agreed actions** that fast track companies committed to implement to ensure that their plans meet the threshold for fast track status
- **required actions** for companies which in general are required so that we can make draft determinations (or final determinations for some aspects of past delivery); and

- **advised actions** for companies to do by a specific date but that are not required for our draft determinations.

Actions are set out in the 'Actions summary tables' and supporting documentation (see section 2.3 for the full suite of documents).

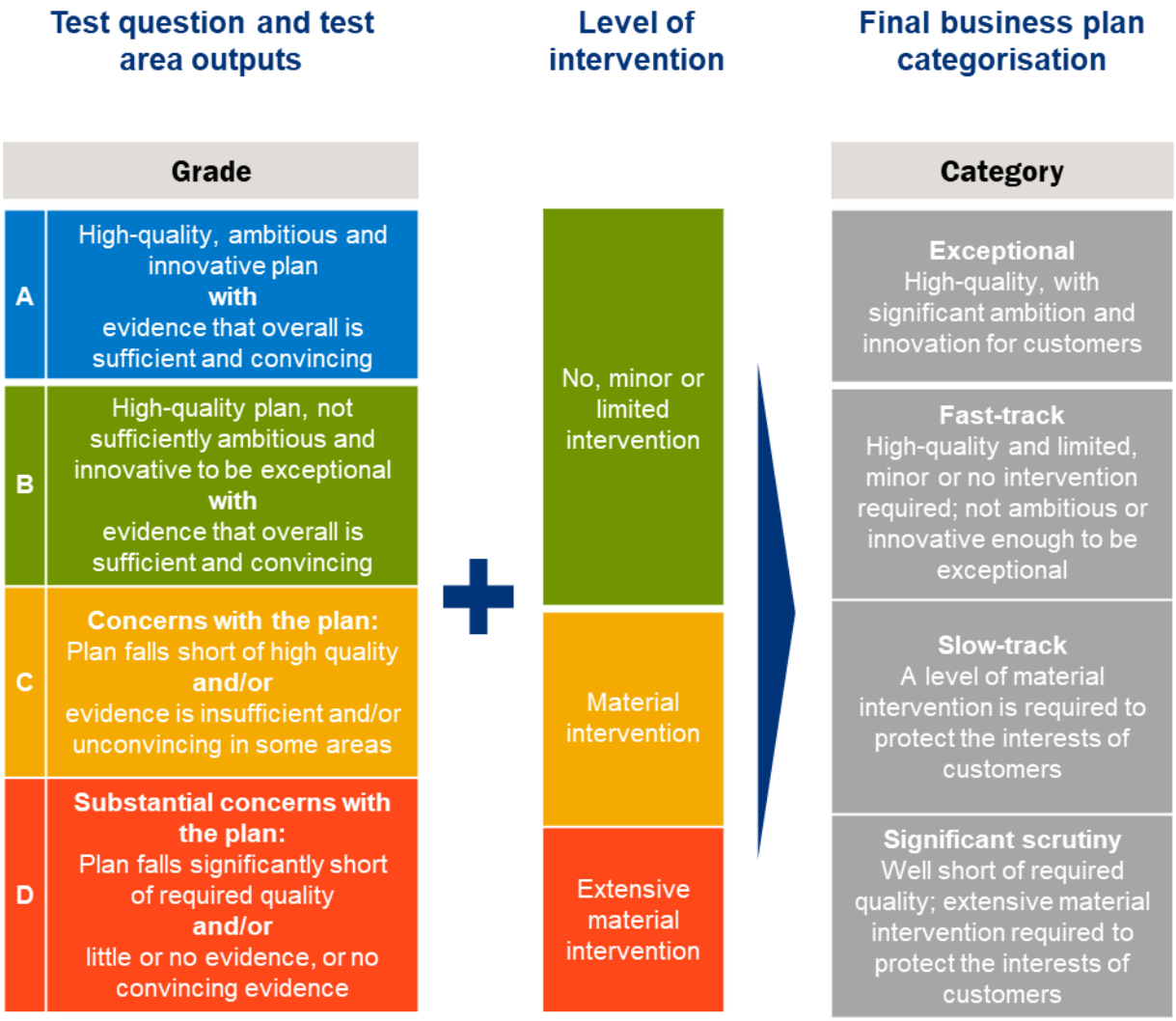
Plans of the 'fast-track' companies are generally high quality. So, their agreed actions focus on the key remaining gaps in their business plan that are of the highest value to customers and the environment. They will help us when we decide on our draft determinations.

Our assessment of the overall company categorisation is an 'in-the-round' assessment. So it takes into account the grades in each test area and the overall level of intervention in the plan.

Companies own their business plans. The plans need to be well evidenced and grounded in excellent customer engagement, and deliver for customers and the environment. We do not use any weightings or 'gates' for individual test areas. We arrive at an overall company categorisation in an objective, proportionate and consistent way, taking into account all relevant factors. There is more detail of the categorisation of each company in the relevant company summary document.

We will set draft determinations for fast-track companies in April, and 'slow-track' and 'significant scrutiny' companies in July. We will then set our final determinations for 2020-25 in December 2019.

Figure 3.5 Company categorisation



3.5 Incentives

There are procedural, financial and reputational rewards for 'fast-track' and 'exceptional' companies. They recognise and encourage the development of business plans that will ultimately benefit all water customers by pushing the boundaries of efficiency and delivery.

'Fast-track' and 'exceptional' companies get:

- early draft determinations;
- a financial reward; and
- a reputation for being the best-performing companies.

For **'significant scrutiny' companies**, given the concerns, we will analyse their plans in more detail. We have an option to impose more stringent requirements to protect customers such as reduced cost sharing rates. We will make a decision on reduced cost sharing rates later in the process.

The incentives for the initial assessment are set out in the table below.

Figure 3.6: Summary of incentives for the initial assessment of business

Fast track: high quality and limited, minor or no intervention required; not ambitious or innovative enough to be exceptional	• A financial reward equivalent to adding 10 basis points to the RoRE) • Early draft determination on 11 April 2019 • A boost to the company's reputation
Slow track: where a level of material intervention is required to protect the interests of customers	• Later draft determination on 18 July 2019 • Some material intervention in the plan
Significant scrutiny: well short of the required quality and where material interventions are required to protect the interests of customers	• Later draft determination on 18 July 2019 • Potentially lower cost-sharing rates • Extensive material intervention in the plan • More ongoing regulatory scrutiny and reporting

3.6 Process for fast tracking

In our assessment we identified that while the plans of Severn Trent Water, South West Water and United Utilities were close to the threshold for fast track status, in the round the high quality was not sufficiently consistent for the plans to be categorised as fast track without further actions. Some interventions in key areas of their plans were required to protect customer interests and ensure that the companies met the threshold for fast track status. Each of the companies has accepted the necessary interventions, and so we award fast track status to each of these companies. The agreed targeted actions are set out in the 'United Utilities: Actions summary table', 'Severn Trent Water: Actions summary table', and South West Water: Actions summary table'.

3.7 Early certainty principle

The procedural benefit of an early draft determination for fast track companies is strengthened by early certainty on specified components of the draft determination related to outcomes and the cost allowance. These components are in the PR19 methodology and set out in Figure 3.7 below.

Early certainty does not apply to the cost of capital or to retail margins. This allows us to make sure these are set at the efficient level for all companies in the final determinations.

During the course of our initial assessment, we identified that we need to make greater than expected intervention in financial incentive rates for performance commitments, due to the degree of variation in rates across companies. This includes interventions in fast track plans. As we are asking a number of companies to provide additional evidence for the rates that they propose, the final level of any more aligned incentive rates is uncertain. We have therefore allowed Severn Trent Water to opt out of early certainty for a limited number of common Performance Commitments, and out of deadbands for all common Performance Commitments. United Utilities have chosen to opt out of the early certainty principle entirely, and South West Water have chosen to opt in to the early certainty principle entirely.

Figure 3.7: Early certainty principle

Early certainty principle	We will not change our draft determination decision related to the company's own cost claims. We will not change bespoke performance commitment levels. We will not change financial incentives on performance commitments[1]. We will not change the number of financial ODIs. We will not change the design of financial incentives in terms of deadbands, caps and collars. (Deadbands are levels of performance that do not lead to outperformance or underperformance payments. Caps and collars are limits on the maximum exposure by companies for their performance on one particular measure.)

3.8 CCGs and the contribution of other regulators

CCGs 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 are driving decision making and are reflected in the company's plan. CCGs also report on whether there are any tensions between delivery of the proposed plan and compliance with statutory environmental and drinking water quality obligations.

We thank all members and chairs of CCGs for their contribution to PR19.

We also welcome the contribution to PR19 made by other regulators and stakeholders such as Environment Agency, Natural England, Natural Resources Wales and Drinking Water Inspectorate, as well as the Consumer Council for Water (CCWater) as part of and via CCGs.

CCG reports welcome the contributions made by the other regulators and CCWater, all of which is invaluable to CCG challenge of business plans.

For slow track and significant scrutiny companies, we expect companies to continue to work with their CCG as they prepare to resubmit (parts of) their business plan in response to our initial assessment.

[1] However, to protect customers, the early certainty principle will not apply if a company's outperformance payment or underperformance penalty rate was the highest or lowest, respectively, of all the companies. This is to protect customers against a company that has proposed ODI rates that are outliers compared to other companies.

4 Test area assessment: Engaging customers

4.1 Why assess customer engagement?

Great customer service starts with an in-depth understanding of customers' preferences and priorities. Companies that move from seeing customers as recipients of services, to seeing them as active participants in the delivery of these services, will benefit from their customers' and communities' knowledge, skills and creativity in solving problems and finding ways to innovate, all helping to achieve a successful long-term future for water. We need to understand the quality of each company's customer engagement approach and the extent to which learning from its customers has influenced each company's business plan and ongoing business operations.

Our approach to 'engaging customers' supports the key themes of PR19. In our PR19 methodology, we set expectations that:

- companies must engage with their customers on how they will address affordability, and make sure they have taken account of customers' views in their proposals;
- understanding customers is essential for companies if they are to improve and tailor their customer service in line with their customers' preferences;
- companies must engage with their customers on longer-term issues, including resilience; and
- companies should be much more innovative in their approaches to customer engagement.

4.2 Our approach

The 'engaging customers' test area considers the following question:

What is the quality of the company's customer engagement and participation, and how well is it incorporated into the company's business plan and ongoing business operations?

In our final methodology, we explained we would take into account evidence that the company has effectively:

- addressed the principles of good customer engagement including, but not limited to, evidence from its CCG;

- taken forward the themes of customer participation including, but not limited to, evidence from its CCG; and
- engaged with customers on longer-term issues, such as resilience, and taken into account the needs and requirements of future customers.

Each company's business plan is accompanied by an independent report to Ofwat from its CCG, which informed most test areas' assessment of business plans. The reports provide CCGs' views on the overall quality of customer engagement and the degree to which the company has reflected the results of this engagement in its business plan. CCG reports highlight areas of challenge and disagreement, including how the company has responded to challenges and any areas of disagreement still outstanding. Our May 2016 'Customer engagement policy statement and expectations for PR19' report set out our expectations for the role, membership and governance of CCGs.

We thank members of CCGs, in particular their chairs, for providing the assurance reports. They are an important source of evidence for the 'engaging customers' test area and most other test areas.

The 'engaging customers test' area is different to many of the other areas of assessment within the initial assessment of business plans. Our final methodology invited companies to explain what customer engagement they did when they developed their business plans – rather than outline the customer engagement they will do in the future. Our customer engagement policy statement sets out what we consider to be the principles of good customer engagement. Our March 2017 'Tapped In' report sets out the principles of customer participation. We expect companies to be guided by these principles as they continue delivery of their current business plan and prepare for delivery of the next.

4.3 Key findings

All companies provide evidence they have adopted our principles of customer engagement, and use a wider range of research techniques and other sources of data to identify customer preferences. This helps to shape many parts of their business plans. Together, companies explain that they engaged with around 1.5 million customers as they developed their business plans.

Companies that perform well in this test:

- provide convincing evidence of high-quality approaches to adopting the principles of customer engagement and participation; and

- demonstrate how what they learned from customers influenced their business plan and ongoing business operations.

In particular, for the business plan to be assessed as high-quality, the company gives evidence to show that customers' preferences and priorities are reflected, for example, in the company's proposals for performance commitments and outcome delivery incentives (ODIs). The best companies provide evidence of innovation, ambition and sector-leading approaches in some areas.

In the 'engaging customers' test area:

- one company receives a grade A
- nine companies receive a grade B; and
- seven companies receive a grade C.

In general, we find more evidence of customer views shaping business plans (such as company investment proposals, performance commitments and financial incentives) than companies changing the way they deliver their ongoing services to customers.

We are mindful of the difference between quality and quantity. We assess the quality of each company's customer engagement and how customers' views are reflected in the business plan, rather than the scale of activities. For example, we find cases where a company had extensive engagement programmes but had not taken enough account of customers' views in the business plans. We also find examples of effective and influential engagement between companies and a relatively smaller number and/or proportion of their customers.

Overall, we are disappointed with the extent of innovation in companies' approaches to customer engagement. Most companies claim at least some innovation or sector-leading approaches to parts of their customer engagement. But we found many approaches are widely adopted across the sector, so companies typically overstate their innovation. For example, companies claim innovation through games during engagement exercises, but we find most of the games are unoriginal and based on sliders, used by many water companies.

In comparison to the customer engagement companies did for their PR14 business plans, we see greater diversity in:

- approaches to establishing customers' willingness to pay for business plan proposals
- examples of bringing together robust data from alternative sources; and

- the types and uses of customer research and business-as-usual customer data in other areas of business planning.

This includes companies adopting more revealed preference and behavioural economics techniques, and more nuanced approaches to engaging with different customer groups. However, we also find instances of:

- poor research approaches;
- poor use of data from other sources; and
- companies failing to reflect customers' views in their business plan proposals.

We find several instances of the CCG not being able to properly fulfil its challenge and assurance role. This is down to limitations in companies' customer engagement approaches and the time companies took to develop their business plans. We also find some inconsistency in how independent and transparent CCGs are and how much they challenged the companies. However, we also find that all CCGs help companies improve the quality of their overall customer engagement and how much customers' preferences are reflected in business plans.

Anglian Water shows ambition and innovation in some areas, and a high-quality approach in all areas of assessment, achieving an overall grade A.

Research techniques and triangulation

Anglian Water gives convincing evidence to show its effective use of a range of customer engagement techniques (both on bringing together different sources of customer evidence in business planning and segmentation). These include innovative multi-stage 'willingness to pay' research, which is externally assured. There is also a clear line of sight between what its customers said and the proposals in its business plan.

Longer-term issues and future customers

Anglian Water gives convincing evidence to show a high-quality, innovative and ambitious approach to engagement with its customers on longer-term issues and its ongoing operations. This includes acceptability and valuation research, as well as specific research on resilience and intergenerational fairness.

Anglian Water, Bristol Water, South West Water and Yorkshire Water provide evidence of research methods that are assessed to be high quality. That said, some of these companies differentiate themselves with innovative and ambitious approaches to ongoing engagement with customers since the last price review

period, informing and educating customers, two-way dialogue with customers and using comparative data to set the context for customers during engagement exercises.

Two-way dialogue and customer education

Northumbrian Water provides high-quality evidence of several approaches to talking and listening to customers. For example, its mobile engagement vehicle (Flo) visits a range of communities across the company's regions. The company involves customers in designing the overall engagement programme ('Defining the Conversation', 2016) then invites the same customers back in 2018 to take part in research about whether the business plan is acceptable. Customers also join a senior leadership team conference in 2017 and co-create elements of the PR19 business plan.

Anglian Water, Northumbrian Water, Wessex Water and United Utilities provide evidence of sector-leading approaches in adopting customer participation themes.

Themes of customer participation

Wessex Water's approach to adopting the principles of customer participation is high quality, and shows innovation and ambition. For example, its water citizenship project and co-creating the 'Money Back Guarantee' with the Young People's Panel to encourage more people to get water meters.

The remaining companies that receive a grade B have high quality overall, but give insufficient evidence in some areas. For example: a lack of demonstration of a high-quality approach to using a range of research methods; insufficient cross-checking of research findings against other data sources or research insights; or, significantly, not reflecting customers' views in proposals for performance commitments and related ODIs.

All companies that receive a grade C provide insufficient evidence of a high-quality approach across its whole customer engagement programme. This includes what research methods the company chose and how it used them, and reflecting customers' views in their business plans.

Three of the companies at grade C overall provide high-quality evidence in one or more areas of assessment, such as:

- ongoing engagement with customers (Southern Water and Thames Water);

- the approach to informing and educating customers or two-way dialogue with customers (South East Water and Thames Water);
- using comparative information to inform customers (Thames Water);
- adopting the themes of customer participation (South East Water and Southern Water); and
- engaging with customers on longer-term issues (South East Water).

We find Portsmouth Water's approach to be well short of the quality required. We find significant issues:

- with the small number of customers the company engaged with;
- with the lack of variety in the effective engagement methods the company used and how it used them;
- with the company making no attempt to take a segmented approach to customer engagement or engage directly with vulnerable customers;
- with uncertainty that the full breadth of the company's customer base is represented in its business planning; and
- with the lack of convincing evidence that the company is adopting the themes of customer participation.

Research methods

We have concerns over the quality of research approaches in Portsmouth Water's overall customer engagement programme. For example: there are issues with sample sizes; it's not clear whether samples are representative; it appears results have been adjusted to try to make them representative; the company gave no information about its approach to using different sources of customer evidence in business planning and no independent assurance of their approach; and it seems that most estimates of the value that customers place on service improvements are from a single source.

Understanding different customers' needs

Portsmouth Water gives no evidence that it adopts a segmented approach to customer engagement. For example, it did not directly engage with vulnerable customers. Instead, it did a simple survey with organisations that support vulnerable customers. We do not believe this is enough for the company to understand the nuances, needs and priorities of vulnerable customers.

4.4 Other examples of good practice and areas of improvement

In this section, we highlight more exceptional examples of good practice. We also give examples of where a company's approach to customer engagement raised concerns.

Examples of good practice

Ongoing engagement with customers

Wessex Water provide evidence of high-quality ongoing customer engagement. For example, it uses feedback data, complaints, social media and other contact data to inform its performance commitments. It also uses a customer opinion tracker survey throughout the year to provide comparable data and short snapshots of customer views at a given time.

Setting the context

Yorkshire Water use behavioural economics techniques (for example, better context and framing to improve customer understanding) to help customers make more informed choices. This leads to higher levels of customer understanding (91% compared to 74% at PR14). Where available, the company use comparative data from other water companies.

Understanding different customers' needs

United Utilities gave evidence to show how it has done research with the most disengaged customers. It uses the results to develop ways to engage this group on an ongoing basis, and to influence its performance commitments for vulnerable customers and water poverty.

Examples of areas of improvement

Not reflecting customers' views effectively

Some companies (Severn Trent Water, South Staffs Water, Thames Water, Wessex Water and United Utilities) give evidence of a high-quality approach to engaging with customers. However, there is insufficient evidence that the

companies reflect customers' views in their proposals for performance commitments or related ODIs.

Ongoing engagement with customers

Hafren Dyfrdwy's business plan provides insufficient evidence of engagement with customers on an ongoing basis. However, we note the company's statement that the Severn Trent Group has set up Innovation, Insight and App technology teams to increase customer participation. The 'Pipe Up' survey shows that the company is collecting daily contact data on customer feedback, but there is not enough evidence to explain use of the data in day to day operations or in business planning.

Setting the context

We find insufficient evidence of SES Water providing comparative information to customers on a consistent basis, including when engaging on current performance, despite a challenge from the company's CCG. That said, we note that the company sets the context for customers with engaging educational materials as a 'warm up' before they get involved in 'willingness to pay' research.

Themes of customer participation

SES Water's business plan acknowledges the principles of customer participation, but gives little evidence of them. This view is echoed by the company's CCG who said:

> "While [the company] has sought to engage with customers on co-creation/co-delivery, the depth and scope was somewhat limited."

Longer-term issues and future customers

There is insufficient evidence of Affinity Water's approach to engaging with future customers (two qualitative research exercises) and customers with experience of resilience issues, like supply interruptions. It seems the company engages with a very small number of customers, which is not likely to give any good insight. The company does not fully reflect customers' preferences for service levels in the business plan because there is a lack of primary 'willingness to pay' research.

Affinity Water fails to provide sufficient evidence to show customer support for the acceptability and affordability of its business plan. This is because testing is done on the impact of different bills to the ones in the final version of the business plan.

The company also only tests 7 out of 19 performance commitments with customers.

There are flaws in the execution of the company's framework of customer engagement and in the timing of the development of the final business plan. This reduces the CCG's ability to challenge the company and provide assurance on the quality of the overall customer engagement approach.

4.5 Test area grades

This table shows the overall individual grades for the engaging customers test area for each company. Results of the engaging customers assessment

Figure 4.1: Results of the engaging customers assessment

Question	Water and sewerage companies											Water only companies					
	Anglian Water	Dŵr Cymru	Hafren Dyfrdwy	Northumbrian Water	Severn Trent Water	South West Water	Southern Water	Thames Water	United Utilities	Wessex Water	Yorkshire Water	Affinity Water	Bristol Water	Portsmouth Water	South East Water	South Staffs Water	SES Water
EC test area	A	B	C	B	B	B	C	C	B	B	B	C	B	C	C	B	C

5 Test area assessment: Addressing affordability and vulnerability

5.1 Why assess affordability and vulnerability?

Affordable bills is one of the main themes of PR19, and a priority in both the UK and Welsh Government's strategic policy statements. Research suggests that almost 3 million customers in England and Wales do not consider their water charges affordable[2]. Affordability is an issue for many customers, not just people struggling to pay their bills. Our 'addressing affordability and vulnerability test' assesses whether bills are affordable and whether companies help customers in need effectively. It also reviews the company's approach to customers in situations of vulnerability.

'Affordability' is the ability of a customer to pay their water bill. 'Vulnerability' relates to customers that may require sensitive, well-designed and flexible support, suited to their non-financial needs. Customers must receive services and value for money, both now and in the long term. Customers' satisfaction with the services they get and their ability to pay bills is the key to their trust and confidence in water and wastewater services. Getting the best deal and service for customers is at the heart of what we do.

If the sector is to build and maintain customers' trust and confidence, water companies must thoroughly understand who their customers are and the specific needs of different types of customer. Companies can use this information to make sure the vital services they provide are accessible to all customers who need them, including those in vulnerable circumstances.

We asked companies to submit business plans that considered affordability and value for money for customers in 2020-25 and beyond. We also asked companies to challenge themselves on the number of customers who receive priority services (extra services to help customers in need, like braille bills for blind customers) and the quality of those services. We also wanted companies to better understand pressures on household finances, and offer appropriate bill support to customers struggling to pay, or at risk of struggling to pay, their bills. Ahead of the price control,

[2] Pg 5, Water For All, CCWater - https://www.ccwater.org.uk/wp-content/uploads/2018/10/Affordability-and-vulnerability-in-the-water-sector-2017-18.pdf

we set an expectation for CCGs to explicitly comment on and challenge their companies in this area and said we would take their evidence into account[3].

5.2 Our approach

We use four test questions in our assessment of companies' approaches to affordability and vulnerability. The key considerations for each question relate back to the principles we said we would test in our final methodology.

Question 1 (overall affordability): How well has the company demonstrated that its bills are affordable and value for money for the 2020-25 period?

For this question, we consider the following for each company:

- Customer engagement – how well is the company engaging with its customers on overall affordability now?
- Customer support – how well does the company understand what affordability looks like for its customers and how is this reflected in its proposals? Are bills acceptable and affordable to customers?
- Effectiveness – how effectively does the company's business plan improve affordability for all its customers? What are the benefits of the company's measures?
- Efficiency – what difference will the company's proposed measures to address affordability make, compared to the cost of its interventions? Will the company's plans help prevent people getting into debt and reduce debt write-offs?

Question 2 (long-term affordability): How well has the company demonstrated that its bills will be affordable and value for money beyond 2025?

For this question, we consider the following for each company[4]:

- Customer engagement and support – how well is the company engaging with its customers on overall affordability in the long term? Are 2025-30 bill proposals acceptable and affordable to customers?

[3] Pg 9, Aide Memoir for Customer Challenge Groups, Ofwat, https://www.ofwat.gov.uk/wp-content/uploads/2018/03/Aide-Memoire-for-Customer-Challenge-Groups.pdf

[4] We wanted to assess how efficient companies' approaches to improving long-term affordability are. However we have not been able to assess that in this area because companies provided variable, non-comparable data, and we were unable to use independent benchmarks.

- Effectiveness – how effectively does the company's business plan address affordability in 2025-30? Has it justified any use of financial levers (decisions about moving bill increases forwards or backwards in time)?

Question 3 (affordability for those struggling to pay): To what extent has the company demonstrated that it has appropriate assistance options in place for those struggling, or at risk of struggling, to pay?

For this question, we consider the following for each company[5]:

- Customer engagement – how well is the company engaging with its customers on assistance for those struggling to pay?
- Customer support – do customers support the assistance measures for people who struggle to pay?
- Effectiveness – how effectively does the company's business plan improve affordability for customers who struggle to pay?
- Accessibility – what will the company do to ensure that customers who are struggling to pay have easy access to help and support?

Question 4 (vulnerability): To what extent does the company identify and provide accessible support for customers in circumstances that make them vulnerable, including proposing a bespoke performance commitment related to vulnerability?

For this question, we consider the following for criteria for each company[6]:

- How well the company uses good-quality, available data to understand its customers and identify people in circumstances that make them vulnerable.
- How well the company engages with other utilities and third parties to identify vulnerability and support people in circumstances that make them vulnerable.
- How targeted, effective and accessible the company's approach is to addressing vulnerability.
- The extent to which the company consults customers and stakeholders, including the CCG, on its plans for vulnerability and they show support for the plans.

[5] We wanted to assess how efficient companies' approaches to improving affordability for those struggling or at risk of struggling to pay are. However we have not been able to assess that in this area because companies provided variable, non-comparable data, and we were unable to use independent benchmarks.

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[6] We wanted to assess how efficient companies' approaches to improving vulnerability support are. However we have not been able to assess that in this area because companies provided variable, non-comparable data, and we were unable to use independent benchmarks.

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5.2.1 Aggregation to test area grade

The overall grade for this test area is based on a combination of the grades from the four questions, which are equally weighted. If a company's grade is split between two grades, we decide on the grade by looking at how the company satisfies individual test question criteria.

5.3 Key findings

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

Companies' plans show a step change in performance on affordability and vulnerability for 2020-25. But they do not fully demonstrate that bills will be affordable beyond 2025, and companies have more work to do to understand long-term affordability issues.

- Fourteen companies propose to cut their average bill in real terms between 2020 and 2025. Only three propose bill increases.
- Most companies are stretching their performance commitment on affordability, and the number of customers getting help with their bills is set to almost double.
- All companies propose to increase the number of people on their priority services register (list of people who are eligible for additional services).
- Many companies have performance commitments on improving the satisfaction of customers in vulnerable situations.

In keeping with the themes outlined above, many companies performed well in the 'addressing affordability and vulnerability test' area. Nine companies are high quality and receive a grade B, and one company receives a grade A for high quality with ambition and innovation. Companies generally perform worse on long-term affordability (question 2) than on overall affordability (question 1) or on vulnerability (question 4). Companies perform well on affordability for customers struggling to pay (question 3), and none receive a grade D on this question.

5.3.1 Overall affordability

In the overall affordability assessment, companies generally provide a good explanation of the potential drivers of affordability concerns, and reasons why bills might become more or less affordable over 2020-25. Most companies propose

cutting bills in real terms, with a sector-wide average reduction by 2025 of 5%. Many put forward metering and water efficiency programmes that link explicitly to improving affordability through reducing water consumption. We also find evidence of some good practice in making payment terms and frequency flexible for all customers. But as this is a key factor in making sure all customers can afford their bills, companies could do more in this area.

There are inconsistencies in companies' approaches to testing acceptability and affordability, and the presentation of these results. This makes it difficult to assess the level of customer support for 2020-25 bills and bill profiles. Examples of poor practice include companies:

- testing bills that were lower than the bills included in the business plan;
- projecting results of current surveys rather than doing new customer research;
- reporting different results in their data tables to their business plans; and
- not testing customer views on a range of topics (for example whether bills are acceptable before and after inflation).

Companies that show good practice in this area:

- tested customer views on the bills included in their business plans;
- present data consistently throughout their submissions; and
- tested customer views on a range of bill profiles and scenarios.

An example of good practice

South Staffs Water propose an innovative approach to overall affordability. It will guarantee flat nominal bills for customers throughout 2020-25 – and engaged extensively with customers on this proposal.

Example of where improvement is required

Affinity Water and Hafren Dyfrdwy receive D grades for overall affordability. Both companies did customer acceptability testing on one bill profile, then increased the final bill they included in their business plans without testing the new price with customers.

5.3.2 Long-term affordability

Many companies, even high performers, do not give consistently convincing evidence about engaging with customers on long-term bills. In particular, very few companies did credible research into 2025-30 bills or bill profiles.

We are particularly concerned that several companies did not submit data on their projected bills for 2025-30. This raises questions about whether they made it clear to their customers what future bills would be. Also, some companies do not properly justify using financial levers.

Example of where improvement is required

Yorkshire Water, South Staffs Water and Hafren Dyfrdwy do not give sufficient information about their forecast bill profiles for 2025-30. Thames Water, South East Water and Affinity Water received D grades as we were not content with their use of financial levers (decisions about moving bill increases forwards or backwards in time) due variously to the quality of assumptions used and lack of evidence provided. Many companies also did not sufficiently test their 2025-30 bills and/or bill profile.

5.3.3 Affordability for customers struggling to pay

In the assessment on affordability for customers struggling to pay, companies show they are going to:

- better understand which customers need support;
- increase the number of customers who get financial assistance; and
- broaden the type of schemes available to address different customer circumstances.

Examples of good practice

Wessex Water plans to offer a range of support to customers struggling, or at risk of struggling, to pay. It also presents an innovative performance commitment about rewarding third parties who successfully refer customers to affordability support schemes.

United Utilities' Town Action Planning initiative involves knocking on 77,000 doors to offer help to people struggling to pay. The company reports:

- 46% of visits were successful
- 20,000 customers signed up to a payment arrangement
- As of July 2018, 67% of the payment plans set up on the visits are being maintained.

On top of this, United Utilities is putting £71 million of shareholder money into schemes for customers who are financially vulnerable.

5.3.4 Vulnerability

We find some evidence of a step change in companies' ambitions to tackle vulnerability. In particular, most companies are proposing to significantly increase the number of households on their priority services registers. The overall number on registers will increase from 400,000 to 2.3 million households by the end of 2025.

However, ambition in this area is not uniformly high. We are concerned that some companies have not considered how to get more people on their priority services registers in enough detail. This is why we are proposing a new common performance commitment in this area (see 'Annex 2: Test areas and test questions').

Many companies provide evidence of high-quality partnerships with third parties, like local authorities, energy companies and charities. The work of these partnerships includes identifying vulnerable customers and reaching out to them with practical help. However, we are concerned that companies have not got a robust approach to keeping their priority services registers up to date. So we are including data checking in our common performance commitment proposal.

Examples of good practice

United Utilities shows an innovative and sector-leading approach to establishing a successful data-sharing partnership with Energy North West. It also used external data and worked with Salford City Council to share Blue Badge data (Blue Badges allow people with disabilities or conditions that affect their mobility to park where other drivers cannot). Altogether this is convincing evidence that its approach to supporting vulnerable customers is well targeted. It plans to continue data sharing with Energy North West and extend its Blue Badge initiative to other local authorities in North West England.

South East Water's business plan includes four performance commitments. One of them is an industry-leading commitment to improve vulnerable customers' satisfaction during water supply interruptions. It has also gained an external accreditation for its approach through the British Standards Institution (BSI) standard for fair, flexible and accessible services.

An example of where improvement is required

Hafren Dyfrdwy receive a grade D for its approach to addressing vulnerability. It proposes a performance commitment that is unlikely to lead to good customer outcomes. It also gave low targets for increasing the number of people on its priority services register. Its plan falls significantly short of the required quality, and provides little evidence on its approach to using data and working with stakeholders to improve outcomes for customers in situations of vulnerability.

5.3.5 Overall summary of test area grades

United Utilities receive a grade A because it provides a high-quality, ambitious and innovative plan, with convincing evidence for all necessary areas. Its proposed bill is falling significantly in real terms. The company is also doing innovative research to understand its customers' needs in terms of vulnerability and affordability, and offering ambitious schemes tailored to customers' needs and circumstances.

Companies that receive a grade B provide high quality plans, but they are not ambitious or innovative enough to be exceptional. For example, South West Water proposes to cut bills in real terms, make significant increases to the number of customers who will be served through affordability support schemes, and increases in reach of and customer satisfaction with priority services.

Companies that receive grade C provide plans that fall short of high quality because there is insufficient or unconvincing evidence in some areas. For example, Thames Water do not provide sufficient evidence that customers found its proposed bills acceptable or affordable. And Portsmouth Water does not challenge itself enough to increase the number of customers getting affordability support or priority services.

Hafren Dyfrdwy receive grade D because it provides a plan that falls significantly short of the required quality. For example, the bill in the business plan for 2020-25 is higher in one of the company's areas than the bill tested with customers. The company's proposed reach of its priority services register is low. And the company has not engaged enough with vulnerable customers on its plans to support them in 2020-25.

5.4 Test area grades

The table below shows individual grades for each affordability and vulnerability test question, and the overall test area grade for each company.

Figure 5.1: Results of the addressing affordability and vulnerability assessment

Question	Water and sewerage companies											Water only companies					
	Anglian Water	Dŵr Cymru	Hafren Dyfrdwy	Northumbrian Water	Severn Trent Water	South West Water	Southern Water	Thames Water	United Utilities	Wessex Water	Yorkshire Water	Affinity Water	Bristol Water	Portsmouth Water	South East Water	South Staffs Water	SES Water
AV test area	B	B	D	B	B	B	B	C	A	B	C	C	C	C	B	C	B
AV1	B	B	D	B	B	B	C	C	A	C	C	D	B	C	C	B	B
AV2	B	C	D	C	C	B	B	D	C	C	D	D	C	C	D	D	B
AV3	B	B	C	B	B	B	B	B	A	A	C	B	B	C	B	C	B
AV4	B	C	D	B	B	A	C	C	A	B	B	B	C	C	A	C	C

6 Test area assessment: Delivering Outcomes for Customers

6.1 Why assess Outcomes?

The outcomes framework is a key component in driving companies to focus on delivering the objectives that matter to today's customers, future customers and the environment in the 2020-25 period and beyond. Outcomes define the service package that companies should deliver for their customers and their incentives to do this. We have two key tools to ensure that companies deliver the right outcomes for customers, performance commitments and ODIs. Performance commitments set out the services that customers should receive[7]. ODIs specify the financial or reputational consequences for companies of outperformance or underperformance against each of these commitments. The framework gives companies the freedom to innovate and explore to find the most cost-effective way of meeting these outcomes.

As performance commitments are the means to hold companies to account for their service delivery, it is essential they are clearly defined. It is also important that performance commitments are stretching, as this pushes companies to innovate in order to deliver better service to their customers.

Properly calibrated ODIs will help align the interests of management and shareholders with customers, as they directly link shareholder returns to the quality of service provided to customers. We protect customers against the risk that companies fail to deliver their commitments through ODI underperformance payments. We use ODI outperformance payments to encourage companies to innovate and stretch themselves, where customers' value improved performance. Where customers do not value improving service beyond proposed commitment levels, we do not allow outperformance payments.

[7] We set 14 common performance commitments applicable to all companies. These core measures concern key issues for customers, such as the quality and reliability of water and wastewater supplies. Companies should also set additional, bespoke performance commitments appropriate to their circumstances. We require companies to set bespoke performance commitments on certain issues, including environmental and resilience challenges. We expect companies to set further bespoke performance commitments, to reflect their customers' particular wishes.

6.2 Our approach

Our approach to the 'delivering outcomes for customers' test area supports the key themes of PR19: great customer service, long-term resilience, affordability and innovation. It focuses on ensuring companies set stretching commitments for all aspects of customer service, including bespoke performance commitments that reflect their customers' preferences. We are promoting long-term operational resilience through two common performance commitments relating to forward-looking resilience: the risk of severe water supply restrictions in a (1-in-200 year) drought; and the percentage of the population at risk of sewer flooding in a severe (1-in-50 year) storm. We are promoting innovation by encouraging companies to propose enhanced outperformance payments for frontier-shifting performance on common performance commitments. We address affordability by encouraging efficiency and requiring companies to assess the overall affordability of their proposals, to set stretching but cost-effective performance commitments.

Our assessment of 'delivering outcomes for customers' considers three questions. We examine business plans for sufficient and convincing evidence that companies seek to understand and address their customers' priorities in their proposed performance commitments and ODIs. We expect business plans to set clear performance commitments with stretching targets, appropriately incentivised and robustly reported. On the basis of the evidence provided, companies' plans receive a grade A-D.

Question 1. How appropriate, well-evidenced and stretching are the company's proposed performance commitments and service levels?

To assess the credibility of the evidence and justification behind companies' proposed performance commitments and associated service levels, we check that each company complies with the PR19 methodology requirements. We consider whether the proposed performance commitments would accurately measure performance for the outcomes that customers care about, across the range of common and bespoke performance commitments. We assess whether each company's performance commitments for 2020-25 and its long-term projections are stretching. Also, we assess how robust, ambitious and innovative are a company's performance reporting structures. Companies which perform well on this test question (Anglian Water, South West Water, and South East Water) provide clear and stretching performance commitments, with well evidenced forecasts for their proposed service levels.

Question 2. How appropriate and well-evidenced is the company's package of ODIs?

ODIs are the reputational and financial incentives for companies to deliver on their performance commitments to customers. Financial ODIs have an important role to play in incentivising frontier-shifting performance and we put a greater onus on these in PR19. These include underperformance payments, if companies do not deliver on their performance commitments, and where appropriate, outperformance payments for going beyond stretching performance commitment levels to deliver additional value for customers. ODIs should be set to ensure that they incentivise companies to deliver those outcomes that are in line with customers' preferences and priorities.

For PR19, we are allowing companies to put forward enhanced ODIs for common performance commitments. This is to incentivise companies to innovate and improve performance beyond the best level currently achieved by any company, in order to deliver benefits for all customers in England and Wales over the long term.

We assess each company's package of ODIs based on whether it provides sufficient and convincing evidence justifying:

- the type of ODI it proposes;
- its ODI outperformance and underperformance payment rates;
- its ODI deadbands, caps and collars, which specify the range either side of the target level for which no payment applies for either outperformance or underperformance, and the maximum payments for outperformance or underperformance; and
- its enhanced ODIs.

Companies which do well on this test question (Anglian Water, South West Water, Yorkshire Water and South East Water) put forward convincing evidence to support their choice of ODI features. They propose outperformance payments where there is strong evidence that doing so would enable them to deliver performance beyond already stretching performance commitments. These companies provide a well-evidenced approach to estimating the costs and benefits of different levels of service performance, and use a bottom-up approach to ODI rate calculation based on

customer evidence. They do not apply top-down adjustments[8]. Only in very limited circumstances do they apply deadbands[9].

Question 3. How appropriate is the company's focus on service performance in its risk/return package?

It is important that the overall ODI package creates the right incentives to align the interests of management and shareholders with those of customers. This should ensure that companies focus on the services that matter to customers and provide adequate protections against poor service delivery. Although ODIs aim to encourage companies to strive for stretching improvements to services and outcomes, it is also important that any outperformance payments are not larger than the value to customers from improved performance.

Companies which do well on this test question (Anglian Water, Southern Water, and South West Water) provide a well-balanced and evidenced ODI package. They propose in-period ODIs, bringing outperformance and underperformance payments closer in time to service delivery, instead of only being assessed in 2025. They meet our asset health expectations by putting forward strong incentives against poor service delivery on asset health challenges. They also put forward convincing measures to protect customers from higher than expected outperformance payments, and consider appropriate bill smoothing.

We provide further details of our approaches to assessing the levels of stretch in companies' proposed performance commitments, companies' proposed ODI rates and enhanced ODIs, asset health packages, and customer protections in the event of unexpected levels of outperformance in 'Technical appendix 1: Delivering outcomes for customers'.

6.2.1 Aggregation to test area grade

The overall grade for this test area is based on a combination of the grades from the three test questions outlined above. We give the greatest consideration to answers to question 1 on performance commitments, as these are likely to have the biggest impact on customers. Followed by question 2 on the appropriateness of the

[8] A top-down adjustment is where a company has divided an overall estimated sum of payments between different performance commitments. A top down adjustment reduces the confidence in ODI rates.
[9] Deadbands reduce the incentive for companies to improve their performance. Setting appropriate levels can be difficult and reduce transparency to customers.

company's ODI package, then question 3 for focus on service performance in the risk/return package. Grade B is awarded for a high quality plan with sufficient and convincing evidence covering all test areas of 'delivering outcomes for customers', but not sufficiently ambitious or innovative to be exceptional. Plans receive a grade C where they fell short of high quality, having insufficient or unconvincing evidence in some areas. Plans receive a D where evidence is lacking or unconvincing and we have substantial concerns.

6.3 Key findings

We find a wide range in the quality of proposals from the companies in the 'delivering outcomes' test area. Most companies propose to improve performance across a range of common and bespoke commitments. Across the industry, water companies have stepped up to our challenge to reduce leakage from their networks by around 15% over the next five years. We see ambition from certain companies to improve performance on per capita consumption: the average amount of water used daily by each person that lives in a household property. Some companies propose challenging targets to improve their performance on water supply interruptions, pollution incidents, and internal sewer flooding (i.e., inside a customer's property). Across business plans, companies commit to reducing all pollution incidents collectively by 37% and the worst performing companies by up to 80%. Most companies plan additional improvements, with around a 40% reduction in supply interruptions and a 25% reduction in sewer flooding. However, others will need to improve their proposed service levels in these areas to the industry upper quartile. There are also gaps in many companies' proposals, including insufficient stretch on some performance commitments. Sometimes we find a lack of incentives to improve performance in areas of poor performance, or a lack of a link between customer preferences and ODI rates.

Overall, companies propose packages of performance commitments covering the areas set out in the PR19 methodology,[10] and generally reflecting customer views. However, there are issues on particular performance commitments. Some companies propose stretching targets in areas of existing strength, but do not respond to the challenge in areas of weakness.

[10] Our methodology encourages companies to provide water and wastewater services resilient to both short term shocks and long-term challenges, at a price affordable to all. Companies must develop bespoke commitments in addition to common performance commitments covering customer experience, day to day performance, and future performance/resilience, in areas such as water quality, supply interruptions, drought restrictions, sewer collapses and flooding.

It is important that a baseline for uniform reporting against performance commitments is established at the start of the 2020-25 period so that companies' performance across the period can be compared with confidence, and that companies then report their performance against this baseline clearly and accurately during the 2020-25 period itself. Although companies propose procedures to report performance information on an ongoing basis, around half of companies need to provide more evidence that they will use the consistent definitions developed by Ofwat and Water UK for reporting on the common performance commitments from 2020 onwards.

We also find no notable ambition or innovation to lift the bar in enhancing reporting of reputational, as opposed to financial, performance commitments. We are strongly encouraging further development of the Discover Water website, which has the potential to enhance the impact of reputational ODIs by publishing accessible information on companies' individual and relative performance on standard metrics. Nevertheless, we expect companies to improve the quality of their own reporting on ODIs, including how they plan to increase their effect on reputation. Few companies propose significant improvements to their reporting.

Companies apply a wide and varied set of approaches to calculation of ODI rates. This results in a very broad range of ODI rates for common performance commitments where it could be expected that customers' preferences would be more similar. Some companies are adopting high quality approaches to setting ODI rates. However, in many cases, we find that a company's approach to use of evidence on customer valuation (of willingness to pay for improvements in service performance) is of poor quality. There also appear to be instances where companies have selectively chosen particular values, or adjusted these values with little supporting evidence.

Companies have typically put forward an incentive package that aligns with our indicative range of the strength of incentives[11]. However, some propose unbalanced packages skewed in the company's favour, which would enable them to earn more on outperformance payments than they would risk incurring in underperformance

[11] We suggest an indicative range for the size of companies' ODI outperformance and underperformance payments of ±1% to ±3% of RoRE at PR19. (This excludes new common performance commitments on Customer Measure of Experience (C-MeX) and the Developer Services Measure of Experience (D-MeX), which have an additional impact on RoRE). The upper end of the outperformance payments range will only be achievable in extremely stretching circumstances, where companies deliver step changes in performance across all their performance commitments.

payments. Companies generally fail to adequately address protections to customers against unduly high outperformance payments. We expect companies to protect customers from bill increases in the event that their ODI payments turn out to be much higher than their expected RoRE ranges for ODIs. Few companies provide confidence of an approach to ensure proper protection for customers. Anglian Water have put forward an overall cap on outperformance payments, as well as caps on payments for individual performance commitments. Dŵr Cymru propose 50% sharing of all outperformance payments plus a mechanism for consulting with customers and other stakeholders on how the remainder of these payments should be deployed.

Overall, three companies provide high quality evidence on the Delivering Outcomes tests, with no material gaps in evidence and receive a grade B at the test area level. We consider that most other companies warrant a C grade. These companies have some areas of high quality across their package of performance commitments and ODIs. Hafren Dyfrdwy is the only company that receive a grade D. We identify material gaps in the evidence it provides.

More details of our assessments of each of the test questions and the overall test area grades are provided in the sections below.

6.3.1 Performance Commitment assessment (test question 1)

We classify nine companies as grade B on the assessment of performance commitments. Overall, companies propose packages of common and bespoke performance commitments covering the areas of focus set out in the methodology and each company's price control areas. Performance commitment proposals generally reflect customer views, however, there is variation in the extent to which bespoke performance commitments reflect each company's circumstances. We expect companies to use bespoke performance commitments to reflect customers' preferences and their own specific circumstances such as particular resilience or asset health challenges, or any specific issues not covered by common performance commitments.

However, while some business plans evidence ambitions to achieve stretching performance commitment levels, some companies only propose stretching targets in their areas of existing strength, and do not respond to the challenge in their areas of weakness. There is little evidence of innovation, and some issues are not fully addressed. For example, some companies do not propose any bespoke resilience performance commitments. Other companies do, but use existing metrics, or variations of these, rather than innovating and tailoring the measures to truly reflect

their needs. Only two companies, United Utilities Water and Dŵr Cymru, propose new bespoke resilience performance commitments that we consider to be innovative and, once fully developed, could be helpful at measuring resilience in a way that both pushes company performance and are easy to communicate to customers. All companies should continue to consider what metrics will help to increase the transparency, assessment and measurement of the resilience of the water and wastewater services that they provide.

We have a range of concerns on performance commitments. Sometimes definitions lack clarity. Some companies have not provided sufficient justification for discontinuing, amending or replacing existing performance commitments. Some performance levels are not stretching. We challenge all companies to step up to deliver stretching performance and service levels for PR19.

Improving performance on water supply interruptions, pollution incidents and internal sewer flooding is vital for companies to build resilience in the round and ensure a reliable water and wastewater service to customers. On these key areas we assessed the upper quartile of the proposed service levels for each year between 2020-21 and 2024-25. Not all companies propose commitments to meet these levels. In line with the methodology, we expect companies to revise their commitments to meet these levels, so that all customers see significant improvements in service.

Most companies respond to the challenge to reduce leakage by at least 15%, although we expect that the current worst performers could go further. The level of per capita consumption varies. Some companies set stretching targets to reduce consumption, with Southern Water targeting industry-leading performance by 2024-25 and Affinity Water targeting the highest percentage reduction over the period 2020-25. However others, including some in areas of water stress, with relatively high per capita consumption levels, show lower ambition and should go further.

Examples of good performance

South West Water proposes stretching performance commitments on a range of measures. The company targets a high level of stretch relative to historic performance and forecasts reaching the upper quartile for pollution incidents, external sewer flooding and internal sewer flooding, and close to forecast upper quartile for supply interruptions.

Examples where improvement is required

Affinity Water provides little evidence that its business plan reflects its customers' priorities, and has the lowest number of bespoke performance commitments of any company. Half of these performance commitments do not satisfy PR19 requirements. The omission of a direct bespoke resilience performance commitment is a material failing. Although there are two common performance commitments on resilience, we required companies to propose additional bespoke performance commitments to reflect their particular resilience challenges.

Portsmouth Water does not meet our expectations on putting forward stretching performance commitments on its common and bespoke performance commitments. A significant number of performance commitments have insufficient levels of stretch in either the near or longer term. In particular, we conclude that it has not met our expectations on stretch for either leakage or per capita consumption.

6.3.2 ODI assessment (test question 2)

Four companies receive a B grade, nine receive a grade C and four receive a grade D on this test question.

Companies generally follow our requirement for ODIs to be in-period as the default, bringing incentives closer in time to service delivery, although several suggest that certain individual performance commitments should have end-of-period ODIs. South Staffs Water structures its overall ODI package around end-of-period incentives.

Companies generally have clear procedures to report accurate information and their performance. Most set out plans to adopt good reporting practice with incremental improvements from the current reporting arrangements. However, around half of the companies need to provide more evidence that they will report common performance commitments consistently. This includes adopting fully consistent definitions for all common performance commitments: companies must report these in line with published definitions by 2019-20.

On the other hand, we see no clear proposals to increase the quality or ambition of companies' reporting on their ODIs, or how they plan to increase their effect on reputation, which we had asked companies to address. Each company should communicate performance to their own customers, using various means to reach a wide range of customers. Additionally, they should report through the DiscoverWater website. The industry should consider how the website can be improved so that

customers can easily view comparative information on the metrics that they most value, including all common performance commitments.

Companies' business plans exhibit a variety of approaches to setting their ODIs, raising concerns that often led to a lower grade. In setting ODIs, some companies set out- and under-performance financial incentives as a default. However, our approach, as set out in the PR19 methodology, is that outperformance payments should only be proposed where a company can demonstrate that they could enable it to achieve beyond stretching performance commitment levels, and their customers support the proposed payment.

We also find that, where companies propose a range of caps and collars, these are justified at an overall level, but not necessarily for specific performance commitments, as is our preference, stated in the PR19 methodology.
On occasion, deadbands are suggested without convincing explanation.

Companies apply varied approaches to understanding customer willingness to pay (WTP) and calculating ODI rates. A wide range of both standard and enhanced ODI rates for common performance commitments are proposed. A number of companies use inappropriate methods of calculating ODI rates. For example, some companies multiply the WTP rates obtained through customer surveys (thereby overriding those results), with insufficient evidence to support this adjustment. This is a particular concern as these adjustments lead to greater proposed outperformance payments.

Examples of good performance

Some ODIs are supported by a high-quality approach, but no company stands out as innovative and ambitious. In these cases, companies use an objective, well-reasoned approach to form a single marginal benefit estimate from customer valuations, using a wide range of evidence, from a range of customer and willingness to pay research. For underperformance rates, there is clear evidence to support the estimate of marginal costs. These packages provide good evidence to demonstrate the use of these inputs in the standard ODI rate formula set out in the methodology, applying the prescribed totex sharing rate where appropriate.

Examples where improvement is required

Some companies fail to provide sufficient evidence to support the use of outperformance payments for a number of performance commitments.

In particular, Wessex Water justify the use of outperformance payments as it 'being the default Ofwat methodology', rather than demonstrating that outperformance will benefit customers.

Dŵr Cymru did not test some ODIs with customers, and allocates some outperformance payments without customer support or convincing evidence. For example, it applies large outperformance payments to performance commitments on resilience and customer trust, despite evidence that customers do not support financial incentives for such measures. ODI rate calculation deviates significantly from PR19 principles, based on analysing a limited number of measures and ultimately using management judgement to set ODI payment ranges.

6.3.3 Assessment of the incentive packages (test question 3)

Three companies receive a grade B, thirteen a C and one a D on this test question. A number of companies put forward an ODI incentive package that aligns with our indicative range of +/- 1 to 3% of return on regulatory equity (RoRE). However, some companies do not adequately explain how their incentives align the interests of their management and shareholders with customers. We also note some instances where the company's package is skewed to deliver certain outcomes at the risk of other outcomes that are important to customers.

We find that many companies fail to ensure that customers are protected from unexpectedly high levels of outperformance payments. Only four companies provide sufficient details on the mechanisms they plan to adopt to adequately protect customers if the company achieves high outperformance payments. For those that do not, we will be requesting that they implement additional protections, in the form of establishing a benefit-sharing mechanism and caps on some ODIs.

On asset health, Southern Water put forward an ODI package offering sufficient long-term protection for customers but, on the whole, companies do not propose adequate measures to address this aspect of the package. The performance threshold at which underperformance payments would be incurred is often set too low to incentivise companies to maintain assets appropriately and improve their service to customers. Some companies do not consider the asset health measures for which they have performed badly in the past, and do not put sufficient underperformance payments on them. Companies' customer engagement on asset health is of variable quality. Generally, they do not provide sufficient evidence that their customers support outperformance payments for asset health measures.

Examples of good performance

Dŵr Cymru proposes a convincing approach to customer protection. The company has a mechanism under which 50% of outperformance payments are returned to customers in the form of lower bills. The remainder is set aside in their 'WaterShare' fund and customers, their CCG and other stakeholders are consulted on its use.

Examples where improvement is required

Hafren Dyfrdwy proposes a very low incentive RoRE package with little evidence of adequate testing with customers or addressing CCG concerns. It does not provide a convincing explanation of how the ODI package would give appropriate incentives and align the interests of management, shareholders and customers. In particular, its business plan contains evidence suggesting that the majority of customers would support incentives within the indicative ranges set out by Ofwat, but the overall package does not reflect this.

Some companies do not demonstrate adequate consideration of customer protections. They do not provide sufficient evidence that they analyse the extremes of their potential returns or consider protection mechanisms (for instance, benefit-sharing, caps, and customer or CCG consultation). Furthermore, some companies have not adequately considered their bill smoothing approach. For example, Northumbrian Water do not propose any protection for customers from higher than expected outperformance payments. They do not propose a cap on any ODIs and do not state that they would smooth bills in the case of earning high outperformance payments.

6.3.4 Overall summary of test area grades

Three companies provide high quality evidence with no material gaps in evidence. In each case they receive a B grade rather than an A because they lack ambition on some common performance commitments, or they demonstrate insufficient innovation across their outcomes package.

South West Water performs very well overall. It proposes a balanced package of performance commitments that reflected customer priorities, with stretching targets for all common performance commitments. It also sets a high quality package of ODIs, balanced across different areas and with evidence that these will incentivise

ambitious performance for customers. However, it does not provide sufficient detail on how customer bills would be protected from the company receiving unexpectedly high outperformance payments.

Most companies receive a C grade. These companies have some areas of high quality across their package of performance commitments and ODIs. However, there are also areas where we have concerns over their approach or the quality of evidence to support it. In particular, a number of companies appear to have used poor quality or inappropriate methods of calculating the ODI rates. A ‘C’ grade highlights that a number of actions are required on their performance commitment and ODI packages, or further evidence required, before draft determinations.

Hafren Dyfrdwy is the only company to receive a grade D. We consider that there are material gaps in the evidence it provides. The company does not evidence how baseline data was calculated and reports no data on the asset health unplanned outages common performance commitment. We have particular concerns over the level of stretch it proposes for per capita consumption and supply interruptions. It also provides insufficient evidence of a consistent approach to setting ODI rates, and the package it proposes is heavily skewed towards certain performance commitments. Although it set low ODI rates overall, it lacks outperformance payment caps on most performance commitments, raising concerns over customer protection.

6.4 Test area grades

The individual grades for the assessment of performance commitments, ODIs, the risk/return package, and the overall test area grade for the delivering outcomes for customer test area are shown for each company in the table below.

Figure 6.1: Results of the delivering outcomes for customers assessment

Question	Water and sewerage companies											Water only companies					
	Anglian Water	Dŵr Cymru	Hafren Dyfrdwy	Northumbrian Water	Severn Trent Water	South West Water	Southern Water	Thames Water	United Utilities	Wessex Water	Yorkshire Water	Affinity Water	Bristol Water	Portsmouth Water	South East Water	South Staffs Water	SES Water
OC test area	B	C	D	C	C	B	C	C	C	C	C	C	C	C	B	C	C
OC1	B	C	D	B	C	B	C	C	C	B	B	C	B	C	B	B	B
OC2	B	D	D	C	C	B	C	C	C	D	B	D	C	C	B	C	C
OC3	B	C	D	C	C	B	B	C	C	C	C	C	C	C	C	C	C

7 Test area assessment: Securing long term resilience

7.1 Why assess resilience?

Resilience is one of the key themes of PR19. The resilience of the water sector is critical to current and future customers. There is now an increased focus on resilience following our duty on resilience, introduced by the Water Act 2014, and the emphasis on resilience in the strategic policy statements of both the UK and Welsh Governments.

Our approach to long-term resilience in the round supports the other key themes of PR19 (customer service, affordable bills and innovation). Resilience in the round considers all aspects of resilience, including operational, corporate and financial resilience. Details of good practice are set out in 'Resilience in the round', published in September 2017.

Resilience is important to customers. Customers expect continuous water and wastewater services, and the impact of even short-term disruptions to customers can be significant. There are also longer-term challenges from climate change and population growth, such as pressures on surface water drainage and drought resilience. Disruptions may also have negative effects on wider society, for example, through their impact on the environment, on the economy and on communities. It is, therefore, vital that companies provide resilient services for customers today and over the long term.

Water companies have a duty to maintain a water supply system and provide a wastewater system, so that they continue to meet their statutory and licence obligations. In this context, the sector requires continual investment to maintain and enhance services. This means companies need ready access to capital markets and to demonstrate their current and long-term resilience to economic and financial shocks and disturbances. Further, companies should make sure the right people, leadership, infrastructure, systems and processes are all in place and working effectively.

7.2 Our approach

The PR19 methodology signalled the importance of companies demonstrating their approach to securing resilience in the round. Seven principles set out our expectations for resilience planning in PR19 business plans.

We want companies to carefully identify risks to their resilience, and to consider a full range of measures to manage these risks, not just over the next five years but also over the long term. Companies should show a good understanding of the condition of their systems, assets and finances, and the key risks they face. We also expect companies to demonstrate that they have robust plans in place to mitigate and manage those risks. Companies should engage and work with customers on their approach to resilience and be innovative in how they manage and address risks by, for example, exploiting opportunities to collaborate with third parties and other water companies, and by better integrating water and wastewater resources.

Our assessment of resilience considers two questions, each spanning operational, financial and corporate resilience.

Question 1: How well has the company used the best available evidence to objectively assess and prioritise the diverse range of risks and consequences of disruptions to its systems and services, and engaged effectively with customers on its assessment of these risks and consequences?

This test looks at resilience in the round, including the risks to operational, financial and corporate resilience. For this purpose, we consider whether companies provide evidence of a systematic and integrated approach to the identification and assessment of all the diverse risks to the resilience of systems and services across the entire business. We consider operational resilience and how well companies apply a robust, objective, comprehensive and well evidenced assessment of priority risks to the delivery of the services their customers depend on, over the next five years and over the longer term.

In order to assess the information companies provide on financial resilience, we consider a range of factors, focusing on the expectations we set out in our 'Putting the sector in balance' position statement. We consider whether companies robustly assess the risks to their long-term resilience for the period to 2025 and beyond, based on their actual capital structure. We expect each company to assess scenarios relevant to its circumstances and against the prescribed suite of scenarios set out in our position statement, building on the long term viability statements in their annual performance reports.

As part of this test, we also take into account corporate resilience: whether the identification and assessment of risks to resilience is embedded in companies' oversight and decision-making and whether, as part of this, they have the necessary capability, systems and processes in place to manage resilience risks.

Question 2: How well has the company objectively assessed the full range of mitigation options, and selected the solutions that represent the best value for money over the long term and have support from customers?

To assess operational resilience, we examine whether companies consider the full range of options for mitigating risks and how consistent these are with the risks previously identified and assessed. We expect companies to systematically consider options that enhance the reliability, resistance, redundancy, response and recovery of systems and services, in order to demonstrate a balanced approach to mitigation.

These options need to be proposed in alignment with customers' views and supported by resilience outcomes that reflect each company's challenges, strategy and ambitions.

For financial resilience, we apply extra scrutiny where we identify heightened risks from companies' capital structures or other financial risks, including where companies:

- target a credit rating that is one notch above the minimum for investment grade (or are at risk of a downgrade to that level);
- propose to maintain gearing levels above the 70% threshold for triggering the gearing outperformance mechanism set out in 'Putting the sector in balance';
- have limited headroom in other key financial ratios; or
- have significant refinancing requirements or other company-specific risk factors.

In order to account for corporate resilience, this test question also assesses how well companies are planning mitigations to maintain their required capability, systems and processes.

7.2.1 Aggregation to test area grade

The resulting grade for this area is based on the lower of the grades assigned to either of these questions. This is because a high-quality plan must include sufficient and convincing evidence of both high-quality risk assessment and the mitigations put in place by the company to address these risks.

7.3 Key findings

7.3.1 In-the-round resilience

Overall, companies' business plans lack systems-based approaches to resilience that account for systems interactions and interdependencies. This limits their consideration of cascading and knock-on impacts and of options that address multiple risks and are developed in partnership.

We welcome companies including assessments of the maturity of their systems in relation to resilience, although these are not generally part of applied frameworks and are disconnected from the companies' business plans.

Examples of good practice

Yorkshire Water's systems-based approach to resilience is of high quality. It incorporates:

- clear mapping of interactions between the company's external and internal systems (within and outside of the company's control); and
- a comprehensive decision-making framework that embeds natural capital accounting.

7.3.2 Operational resilience

Companies typically consider a long list of resilience hazards, with limited regard to the risk that these pose to their systems. They provide insufficient analysis and quantification of the impact and consequences to customers and of the residual risk after existing and planned mitigations have been applied.

Most companies sought to engage customers on water resilience risks and on their plans to mitigate these. By contrast, environmental resilience and natural capital valuations appear to be in their infancy within companies' plans, which are limited in their inclusion of environmental issues that go beyond statutory obligations. In part as a consequence of this, plans are typically less developed on wastewater and drainage challenges when compared to clean water.

Most companies consider a wide range of options and mitigations, including solutions to change customer behaviour and promote efficiency. But fewer

companies consider emergency and response solutions and nature-based solutions beyond typical catchment management schemes; plans rely on conventional engineering solutions that increase reliability and redundancy. We consider that companies should evaluate multiple risks, assess future uncertainty and seek partnerships to ensure that they choose the best options.

Overall, most plans lack a clear line of sight between the risks to resilience identified by the company, the proposed mitigations presented in the plan to tackle these risks, and how these mitigation plans are reflected as service improvements in the form of stretching performance commitments.

In particular, bespoke resilience performance commitments do not generally reflect companies' approaches to resilience or their asset management strategies. For example, bespoke resilience performance commitments (such as, the percentage of population supplied by single supply system) could be used to complement common asset health commitments (which relate to asset reliability). This would mean that redundancy (for example, alternative sources of supply), resistance, and response and recovery mitigations could also be supported and monitored by performance commitments as part of companies' resilience strategies. But bespoke resilience performance commitments are rarely used in this way.

Examples of good practice

United Utilities uses qualitative and quantitative approaches to assess a wide range of risks associated with operational, financial and corporate resilience issues. The company also uses these approaches to develop options that include collaborating with third parties and promoting solutions that take advantage of, and work with, natural processes.

South West Water also provides high-quality evidence of collaboration with stakeholders to develop efficient options and integrated systems around resilience. One example is its collaboration within the multi-stakeholder SIM4NEXUS research project to improve its understanding of the inter-relationships and interdependencies of water, energy and land management in the South West of England.

Examples of where improvement is required

While Hafren Dyfrdwy's plan covers elements of operational, financial and corporate resilience at a high level, it provides a limited and insufficiently evidenced assessment and mitigation of risks to resilience. This includes a poorly justified list of prioritised risks. The company's assessment of how these risks

affect resilience and how the proposed plan mitigates this, improving the resilience of its systems and services in the long term, is also limited.

Affinity Water provides evidence about the maturity of its systems and how this will be improved in the future, but it has not presented a robust draft water resources management plan that supports its long-term resilience strategy. Such strategy is also limited by the company's lack of direct bespoke resilience performance commitments and the exposure of its customers to severe water restrictions, now and in the future.

While Thames Water assesses a wide range of mitigation options supported by customers, the company's historical poor performance around asset health issues is not addressed by significant improvements in associated performance commitments for 2020-25 and the long term.

7.3.3 Financial resilience

The quality of the financial resilience assessment and assurance in companies' business plans varies across the sector. Most plans build on the evidence presented in companies' Long-Term Viability Statements, although the extent to which they assess financial resilience beyond 2025 varies.

Stronger plans project gearing and ratios that are consistent with comfortable investment grade ratings, and consider financial resilience beyond 2025. They contain clear board statements about financial resilience, assess financial resilience by reference to the company's own internal risk register, and present clear evidence of risk management and mitigation measures.

Weaker plans do not contain convincing evidence that the company has assessed all factors relevant to their financial resilience, or do not clearly demonstrate how risks relate to its internal risk assessment. Concerns arise, for example, where companies do not provide convincing evidence that they have considered all risks relevant to their circumstances. This includes circumstances where:

- companies do not provide convincing evidence in support of a cost of capital that is above our early view, and have not considered the steps they would take to maintain their financial resilience if their proposed cost of capital were not allowed; or
- there is little headroom in financial ratios even before the assessment of downside scenarios.

Similarly, concerns arise where companies do not assess risks associated with debt financing requirements, or the risks of refinancing tranches of debt with low credit ratings. In some cases there is evidence, in the third party reports accompanying company plans, of a need for a more integrated approach to assessing financial resilience, but insufficient evidence in the business plans themselves to demonstrate how such recommendations will be taken forward.

In some instances, the financial resilience assessment is underpinned by an assessment against covenant requirements, rather than a wider assessment that takes account of other factors, such as financial ratios assessed by the credit rating agencies.

In some cases there is insufficient evidence that companies are adequately considering:

- the risks around targeting a credit rating only one notch above the minimum for investment grade; and
- whether that headroom allows them to remain financially resilient in the long term.

In some cases there is insufficient consideration of the mitigation measures that could be put in place to maintain credit rating headroom.

While some highly geared companies have taken steps, or propose to take steps, to reduce gearing, in some cases there is insufficient evidence to confirm that this will be achieved. In the round, it is unclear whether companies with high levels of gearing are including the impact of the gearing outperformance mechanism when assessing their resilience.

While we do not necessarily have concerns about the financial viability of companies with weaker plans, it is important that companies providing an essential service to customers can demonstrate that they are resilient to the impact of financial shocks on an ongoing basis.

Examples of good practice

United Utilities provides a high quality assessment of its financial resilience for the period from 2020 to 2025, showing positions for its key credit rating and financial ratios. The company's financial resilience assessment is underpinned by its assessment of risks, including the strength of its financial position and its ability to maintain access to debt markets. There is convincing evidence that United Utilities

has considered a range of measures to secure its long-term resilience and the mitigation measures it could take in extreme circumstances.

Examples of where improvement is required

South Staffs Water covers some elements of its operational and corporate resilience, but provides insufficient evidence of its approach to financial resilience. Its plan lacks either evidence of results from stress scenarios, or evidence that the company has assessed the impact these scenarios would have on the proposed nominal bill profile. The company's proposals for effective mitigating actions aimed at addressing financial risks are also limited.

7.3.4 Corporate resilience

At the corporate level, while business plans usually describe well established systems and processes to identify and assess risks to resilience, these are not fully integrated into the companies' decision making. For example, companies generally have some form of asset management system in place, but the effective use of such systems to inform asset health improvements in the context of resilience risks is not clearly demonstrated in their plans. As a consequence, there is insufficient evidence that the identification, assessment and mitigation of risks to resilience are embedded in companies' decision making and oversight.

In addition, mitigations to address risks to corporate resilience and risks to the delivery of the plan are unclear, with limited commitments and few detailed measures. For example, while most companies' plans consider supply chain risks, these are not met by proposals that ensure relationships through the supply chain support corporate resilience – for example, by clarifying accountability, good governance and the flow of communication to enable effective and timely decision making.

We find similar concerns in companies' plans when discussing other corporate resilience risks, such as workforce capability issues or future skills gaps.

Examples of good practice

Dŵr Cymru includes a strategic document on resilience, 'Welsh Water 2050', which underpins its plan with a high-level analysis of threats and strategic responses across the business. The document's approach demonstrates that Dŵr Cymru has

developed a long-term vision around resilience and that this supports the company's plans.

Examples of where improvement is required

Southern Water acknowledges that issues around corporate governance (that is, organisational structure, processes, culture and behaviours) have been responsible for compliance incidents in the past. However, its plan presents only very limited details of actions that will improve this situation (lacking, for example, an implementation timeline, planned improvements and systems affected). These limitations are especially apparent in light of the significant impact such issues may have on corporate resilience, now and in the future.

7.3.5 Overall summary of test area grades

Overall performance for the resilience test area is generally short of high quality. Only two companies provide sufficient evidence to receive a B grade overall, and no companies receive an A.

Companies that receive a B grade submitted high quality plans with sufficient and convincing evidence in most of the necessary areas. These plans provide quality evidence across most elements of operational, financial and corporate resilience. However, they show specific shortcomings in a few areas of the resilience assessment or in common themes across the sector (such as a lack of a systems-based approach to resilience).

In contrast, companies that receive a C grade fall short of high quality, with insufficient and/or unconvincing evidence in some of the necessary areas of their plans. These shortcomings vary in materiality, from a general lack of detail across the test area to limited evidence in key elements of our assessment (such as operational or financial resilience).

Companies receiving D grades fall significantly short of high quality and/or present little or unconvincing evidence in most of the necessary areas of their plans. This generally means companies falling short of high quality across the resilience test, with significant concerns in key elements of the assessment.

7.4 Test area grades

The individual grades for the risk assessment (question 1) and risk mitigation (question 2) tests, and the test area grade for resilience overall, are presented for each company in the table below.

Figure 7.1: Results of the securing long term resilience assessment

Question	Water and sewerage companies												Water only companies				
	Anglian Water	Dŵr Cymru	Hafren Dyfrdwy	Northumbrian Water	Severn Trent Water	South West Water	Southern Water	Thames Water	United Utilities	Wessex Water	Yorkshire Water	Affinity Water	Bristol Water	Portsmouth Water	South East Water	South Staffs Water	SES Water
LR test area	C	C	D	C	C	B	D	D	B	C	C	D	C	C	C	D	C
LR1	C	C	D	C	C	B	D	C	B	C	B	C	C	C	C	D	C
LR2	C	B	C	C	C	B	C	D	B	C	C	D	C	C	C	C	C

8 Test area assessment: Targeted controls, markets and innovation

8.1 Why assess targeted controls, markets and innovation?

Our approach to 'targeted controls, markets and innovation' test area supports the four key themes of PR19. The test area includes three main components: innovation culture, markets and controls, and procurement.

The water sector is facing a series of challenges, now, and in the coming years. Population growth and climate change impact heavily on the sector. Population changes can also hamper affordability because of the high incremental cost to increase capacity. To meet these challenges, companies need to have innovation at their core. This is why we have put innovation at the centre of PR19, and in this test area we look at the innovation culture.

A **culture of innovation** helps companies to deliver long-term resilience, great customer service and affordable bills by delivering services in different and better ways. We assess companies' capacity and readiness to innovate. We consider that this manifests itself through a company's culture which needs to embed innovation throughout the business. An organisation's culture affects norms, values and behaviours, and for innovation can be manifested through its systems, processes and people. We expect companies' innovation strategies to be built into various elements of their plans in a similar way to resilience. This helps reinforce the importance of innovation for all companies and make innovation an integral part of their business plans.

Separate controls enable targeted regulation of monopolistic activities, which helps companies to identify and deliver efficiency gains and investment needs to support a more resilient service. This ensures customers are protected and get secure, sustainable, and affordable water and wastewater services. Separate controls also promote wholesale markets (like in water resources and bioresources), by revealing improved information that will incentivise companies to deliver better value for customers, the environment and wider society.

New **markets** – places where buyers meet sellers – create opportunities for companies to look beyond traditional company boundaries and their own in-house solutions to meet the long-term needs of customers. This can promote choice of wholesale services, which also helps facilitate resilience, as alternative sources of supply are available, if an existing source fails.

Getting the right services in the right way helps companies to deliver the best outcomes for customers and the environment. For this reason, we encourage **procurement** at different stages of the value chain.

Direct procurement for customers means arrangements where a water company competitively tenders for a third party (a competitively appointed provider) to design, build, finance, operate and maintain infrastructure that would otherwise have been delivered by the incumbent water company. Our approach in PR19 promotes innovation and resilience by allowing new players to bring new ideas and approaches to the delivery of key projects. It also ensures companies consider using direct procurement to deliver large-scale projects efficiently, contributing to affordable bills for customers. It will improve the delivery of projects, which in turn will improve the customer experience.

For water resources, we required companies to develop a bid assessment framework to provide third parties with clarity and confidence that their bids to supply water resources, leakage or demand management services will be assessed fairly, in particular, against the company supplying its own in-house solution.

8.2 Our approach

The ‘targeted controls, markets and innovation’ test area considers seven questions grouped under the main themes on innovation culture, markets and controls, and procurement.

8.2.1 Innovation culture

Question 1 (innovation): How well does the company’s business plan demonstrate that it has the right culture for innovation which enables it, through its systems, processes and people, to deliver results for customers and the environment from innovation?

We assess companies’ culture of innovation by looking for evidence of 14 drivers of innovation, grouped under three key areas:

- the right environment and space;
- the right leadership and support; and
- individuals can effectively work together.

We sense-check our results by looking across at five other relevant initial assessment of business plans test areas for evidence of innovation and ambition. A

company can only achieve the highest grade for this question if there is evidence that the culture has delivered innovative results in other test areas. We grade companies highly where they provided good evidence for the majority of our drivers.

8.2.2 Markets and controls

Question 2 (markets): How well does the company use and engage with markets to deliver greater efficiency and innovation, and to enhance resilience in the provision of wholesale and retail water and wastewater services to secure value for customers, the environment and the wider economy; and to support ambitious performance for the 2020-25 period and over the longer term?

We assess four areas related to the use of markets:

- identification and management of gap sites and voids12 to ensure customers' bills are fair;
- learning lessons and adopting innovation from the business retail market to help improve companies' activities that are non-contestable; and
- use of markets, catchment management (preventing pollution from getting into raw water sources rather than, for example, treating the water after contamination) and partnership working for both wastewater and water network plus to benefit customers and the environment.

We grade companies highly when they addressed all of these areas well. We consider matters related to water resources markets and bioresources markets under questions 3 and 4 respectively.

Question 3 (water resources): To what extent has the company set out a well evidenced long-term strategy for securing resilient and sustainable water resources, considering a twin-track approach of supply-side and demand-side options and integrating third party options where appropriate, to meet the needs of customers and the environment in the 2020-25 period and over the longer term?

A separate control for water resources provides a framework to protect the interests of customers through better targeted regulation and increased management focus.

[12] A gap site is a property where water and/or wastewater services are being consumed, but the property is not on a water company's system and is therefore not billed. Voids are properties classed by water companies as being vacant.

We expect greater collaboration between companies and other water resources service providers, by encouraging:

- more trading of existing water resources between water companies;
- water companies to more actively procure water resources and innovative demand-side solutions from third party service providers; and
- a coordinated regional approach to developing new water resources solutions.

We assess four areas related to water resources:

- engaging with third parties, including a collaborative approach to developing new supply and demand water resources solutions;
- appropriate water resources management plans (WRMPs) and the consistency with which this is reflected in companies' business plans;
- facilitating and preparing for a potential future bilateral market in England, which will allow business retailers to procure water resources directly from third parties; and
- where relevant, proposed risk sharing arrangements for large new water resources investments (for example, storage reservoirs and desalination plants) to ensure customers are protected.

We grade companies highly when they address these areas well.

Question 4 (bioresources): To what extent does the company have a well evidenced long-term strategy for delivering bioresources services, integrating an assessment of the value from the delivery of bioresources services by third parties for the 2020-25 period and over the longer term?

Bioresources refers to wastewater sludge transport, treatment, recycling and disposal. A separate control for bioresources will enable and encourage the development of a range of markets for bioresources and related markets in other organic wastes. The design of the control is intended to encourage companies to trade with third parties, delivering greater innovation and efficiency.

We assess companies' business plans to consider the robustness of their data to ensure that the bioresources price control can be set appropriately and consider how well companies had explored trading and other market approaches in developing their strategy for bioresources services. Specifically, we assess:

- the extent to which companies show evidence of measurement of sludge and how they forecast sludge volumes;

- the extent to which companies show evidence of an appropriate split between fixed and variable revenue;
- the quality of companies' bioresources strategies;
- the extent to which companies use appointed assets for non-appointed business and how the benefits would be shared with customers; and
- the extent to which companies consider the use of third-party suppliers and what preparation is in place for this.

We grade companies highly where they address issues related to both market strategy and data robustness.

Question 5 (regulatory capital value, RCV): How appropriate is the company's proposed pre-2020 RCV allocation between water resources and water network plus, and between bioresources and wastewater network plus – taking into account the guidance and/or feedback we have provided?

Moving to four separate controls aims to promote markets and deliver value to customers. To do this, we need to allocate the existing asset bases (or RCV) between the new separate controls. In 2017 we engaged with the sector and published guidance[13] for companies on how these allocations should be done. In early 2018 we assessed companies' allocations and published our feedback.

The initial assessment of business plans focuses on how companies addressed our feedback in their business plans.

8.2.3 Procurement

Question 6 (bid assessment framework): To what extent has the company produced a company bid assessment framework for water resources, demand management and leakage services that has demonstrated a clear commitment to the key procurement principles of transparency, equality/non-discrimination and proportionality, and the best practice recommendations?

As part of transparency, we assess whether companies' proposed processes for third parties to submit bids to supply services are clearly explained. This includes

[13] For bioresources the published feedback can be found here. For water resources the published feedback can be found here.

assessing whether the level of detail in the specification is sufficient, and whether there are opportunities for third parties to receive feedback following a bid.

The principle of equal treatment is designed to provide confidence to third party bidders that their bids will be assessed fairly. This assesses whether an in-house proposed solution from the incumbent water supplier, is evaluated with the same criteria for both the in-house solution and the third party bid(s). The company's process must also ensure confidentiality and protect any commercially sensitive data provided by third parties.

To assess whether the principle of proportionality is met, we assess whether the bid specification detail is designed to achieve the above effects and provides value for money for customers.

We grade companies highly when they address all the relevant criteria. The maximum grade possible for this question is a B because it concerns compliance with procurement principles and applicable legislation, and so does not require innovation or ambition.

Question 7 (direct procurement for customers): To what extent has the company clearly demonstrated that it has considered whether all relevant projects are technically suitable for direct procurement for customers? Where it has one or more technically suitable projects, to what extent has the company provided a well reasoned and well evidenced value for money assessment supporting its decision on whether or not to take forward each technically suitable project using direct procurement for customers?

Direct procurement for customers refers to competitive tendering for third party delivery, including financing, of large assets on water and wastewater networks. When reviewing companies' business plans, we look for evidence of companies' decision making processes, which should consider:

- whether the project meets a £100 million threshold in terms of whole-life total expenditure (totex);
- the technical discreteness of the projects; and
- a value for money assessment using a best practice business case approach.

In our assessment, we consider the extent to which companies:

- demonstrate a process and the results of a review against the £100 million threshold;

- carry out a thorough technical review using the guidance and based on the assumption that projects should be assessed for value for money, unless there is clear and well documented evidence to reject the scheme; and
- provide a robust business case with a clear understanding of the delivery through direct procurement for customers, placing customer interests at the core of the case.

We grade companies highly when they they provide a well evidenced process for identifying schemes and testing them against the technical guidance, and have closely followed a best practice business case approach, such as the HM Treasury Five Case Model in their value for money assessment.

8.2.4 Aggregation to test area grade

A company's overall grade in this test area reflects the grades they achieved across the seven component questions, using appropriate weightings. Questions related to the use of markets and third party delivery generally have a higher weight than others.

All questions receive a grade from A to D, except the two questions related to the allocation of RCV between controls (question five) and the development of Bid Assessment Frameworks (question six). These two questions had a maximum grade of a B because there is less scope for companies' to demonstrate ambition and innovation in these areas.

8.3 Key findings

Overall, the quality of companies' plans is mixed and often falls short of high quality. Around a third of the companies achieve a B grade and the rest achieve a C grade. No company achieves an A grade, because no company provides convincing evidence of an innovative and ambitious plan across a sufficient number of test questions.

8.3.1 Innovation culture

Innovation is one of our key themes for PR19. Innovation must be at the core of every company to deliver long-term resilience, great customer service and affordability.

There are mixed results across companies in terms of building a culture and capability to deliver future solutions. It is encouraging that all companies recognise the importance of innovation in their business plans and there are some examples of best practice. However, ten companies still have to demonstrate that they have a culture which encourages and supports innovation.

There is some evidence of innovation in how companies have engaged with customers and how they propose to address affordability and vulnerability. However, we would like to see more evidence of how companies will innovate to meet future challenges around resilience and to deliver stretching performance commitments.

Companies perform reasonably well for senior leadership support, but fail to demonstrate how staff are more widely engaged or incentivised. Evidence of risk tolerance is limited and, where it is cited, companies generally focus on reducing the risk of failure, rather than accepting a level of failure and learning from it.

We find limited evidence of collaboration across companies to address common innovation goals, and investment in working towards these goals appears fragmented. For example, although it is encouraging that the majority of companies work with their local universities to address challenges, more benefits could be realised if these separate projects shared data or resources, or if the sector collectively worked to address common challenges.

Examples of good practice

United Utilities receive the only A grade for this question because it demonstrates that:

- it has made innovation a core value linked to everyone's annual appraisal/bonus process and has a good structure of support in place at Director, Supervisor and Team level;
- its employees and supply chain are encouraged to address business challenges now and in the future; and
- it has a balanced approach to risk tolerance, where it accepts that not all innovations succeed and that it can learn from failure.

United Utilities also performs well in other test areas in relation to innovation. For example, the company demonstrates innovation and ambition regarding affordability and vulnerability and 'engaging customers'.

Northumbrian Water receives a grade B in this question, with the following notable strengths:

- it communicates challenges well internally and externally as well as having excellent methods of facilitating debate; and
- employees at all levels in the organisation, and external stakeholders, collaborate and participate, working together in partnership.

Examples of areas where improvement is required

South Staffs Water provides limited or no evidence for the majority of the drivers that are widely regarded as being key to establishing a culture of innovation, and which therefore form the bulk of our assessment in this area. Although it discusses other areas it considers to be innovative, it did not demonstrate these areas are relevant for developing the company's culture of innovation, they focus on general good working practices and the results of innovation, rather than the culture which had led to those results.

Affinity Water provides insufficient evidence that it has the right environment and space, the right leadership and support or that individuals effectively work together in order to support a culture and capability for innovation. Affinity Water also shows little evidence of the application of innovative ideas across the rest of its business plans.

8.3.2 Markets and controls

Markets

Companies achieved a mix of grades against this question. Only a few companies demonstrate that they are effectively addressing issues to maximise opportunities from markets.

Within the topics this questions covers, companies generally provide relatively strong evidence regarding their use of markets, catchment management and partnership working for both wastewater and water network plus.

Examples of good practice

Wessex Water demonstrates a plan for the effective use of markets to deliver services related to water and wastewater network-plus. The company has

embedded a scheme for creating an online reverse auction for pesticide reduction from farming (EnTrade). This is innovative for the industry and Wessex Water demonstrate cost savings and environmental benefits from using these natural solutions, compared with engineered solutions.

Wessex Water ran its first auction with farmers in 2015 and saved 30% on nitrogen removal costs. It then ran further auctions in 2017 and 2018 with increased savings. This approach is being extended to future years. Wessex Water also plans to expand this approach to a trial for phosphate reduction in wastewater.

Examples of areas where improvement is required

Bristol Water's plan contains insufficient evidence regarding markets, catchment management and partnership working to deliver solutions related to water and wastewater network plus, as opposed to traditional engineering approaches. For example, there is a lack of detail regarding the company's engagement with farmers, the scale of the schemes undertaken and the level of incentive payments to reduce pollution. There is also insufficient evidence to demonstrate catchment management activities will be delivered in the coming years.

8.3.3 Water resources

The results of this test are mixed. Half of the companies receive a grade A or B, while the other half receive a grade C or D.

In relation to water resources strategies, companies that achieved higher grades presented compelling and comprehensive WRMPs using a twin-track approach with feasible and deliverable options. The rest of the companies do not demonstrate sufficient evidence of implementing an integrated twin-track approach to water resources, taking account of demand options and strategic supply solutions.

On the whole, many companies provided limited evidence on their engagement with markets in water resources. This includes limited consideration of bilateral markets, where the quality of the business data tables was also limited.

Companies that perform well show a good and round understanding of markets under this control, engaging with third parties for supply and demand options together with a preparation for the bilateral market. In relation to water resource markets, most companies explore supply options from third party providers, including water trades either as an exporter or importer, but use of demand options is far less

frequent. However, good business plans present convincing evidence of seeking or implementing both demand and supply schemes from third party providers. A significant proportion of companies engage poorly with markets for any type of solution. Companies that show a good understanding of what they need to achieve for bilateral markets are a minority. The quality of the respective business tables is in usually good.

Regarding companies' long-term risk sharing arrangements, Portsmouth Water and Severn Trent Water's proposed approaches do not adequately address the required design criteria, meaning that customers could bear too much risk. Southern Water does not justify why it has not proposed a risk-sharing arrangement for a significant water resource scheme. This question is not relevant to any other company.

Examples of good practice

South West Water is implementing an internal water resources market from 2020. This places a system operator in charge of long-term water resources planning and advises on short-term system optimisation. The company will engage with third parties for water supply through the Water Resources Market Information website, supplemented by a clear bid assessment framework.

Potential benefits include helping to reveal the price of water and preparing for a bilateral market. As part of this preparation, the company has also provided initial estimations of access prices and notional charges for water resources.

The company also has a high quality WRMP. Notable features include strong engagement with markets, a range of different demand solutions and leading a multi-party trade to supply 20 Ml/day from the Bournemouth region to Southern Water in collaboration with Wessex Water during the period 2025-2030.

Examples of areas where improvement is required

Both Affinity Water and Southern Water fall short of a high-quality long-term strategy for water resources.

Affinity Water provides limited evidence of collaboration to explore short-term trading solutions and does not provide good evidence on the third party solution to reduce non-household water demand.

We have concerns about the deliverability of Southern Water's supply options, its approach to regional planning and water imports. The company also fails to

consider a long-term risk sharing arrangement for its proposed Fawley desalination plant, which has major costs allocated to its water resources control.

Both companies consider long term regional supply options to meet future supply needs, including transfers linked to the reservoir development in neighbouring regions. Despite this positive development, the companies provide limited evidence supporting its decision making approach and do not fully address our comments to the draft water resources management plans.

8.3.4 Bioresources

We ask companies to provide robust data to ensure that the bioresources price control can be set appropriately and set out a long-term strategy for delivering bioresources services, integrating an assessment of the value from the delivery of bioresources services by third parties for the 2020-25 period and over the longer term.

Many companies fall short of providing high quality plans with robust data and an integrated strategy for using third party delivery of treatment and transport of sludge. Some companies provided robust forecast information and supporting evidence, but provided insufficient evidence of engagement with third parties or opportunities for trades. Other companies performed better in providing a robust sludge strategy but fell short of providing robust and well evidenced data.

One company has a high-quality plan overall, so receives a B grade. All other companies receive a C grade.

These are some common themes emerging from our assessment.

- Many companies are considering the use of third parties for high-value services. However, the level of detail on approaches to third-party engagement is limited in most cases.
- Most companies do not address how profits from the use of appointed assets for non-appointed business will be shared with customers.
- There is often a lack of consideration of the risks of using appointed assets for non-appointed business, or of use of third party services.
- The degree of trading is variable across companies, with short-term resilience trades more common and longer-term trades still at the early stages of exploration.
- Some business plan narratives give the impression that significant volumes will be traded, but their forecasts do not show this.

- The approaches put forward to achieve efficiencies are mostly what would be expected as part of a well-functioning asset management business, and lack innovation and ambition for developing the bioresource market.
- Most companies fail to provide sufficient detail on their approach to sludge measurement.
- In many cases, there is little or no supporting evidence for the fixed and variable bioresources revenue split.

Examples of good practice

Yorkshire Water provides a high quality plan which is particularly strong on the use of markets. The company cites a number of specific projects where it has engaged with third parties, including the refurbishment of the sludge treatment facility at Naburn. It also outlines general plans for the outsourcing of thickening and dewatering, biogas management and the market delivery of sludge treatment capacity. The company also demonstrates that it is looking at both high-value and low-value activities.

Examples of areas where improvement is required

Southern Water is the only company to allocate 100% of its revenue required as variable. The company does not provide any explanation for this or why its cost structure is different from all other companies.

Dŵr Cymru states that it can offer a competitive unit cost for treatment at its advanced anaerobic digestion facilities for long- and short-term trades. While it is clearly exploring the option, no evidence is provided for how it would share the benefits of using appointed assets for non-appointed activities with customers.

8.3.5 RCV allocation

The majority of companies receive a grade B, the highest possible grade for this question, and address our previous feedback. Only Thames Water and United Utilities fail to justify their approach appropriately, so they receive a grade C. In the case of United Utilities, we still have concerns about the validity of the RCV allocation between the water resources and network plus controls. Details of the feedback we published previously are referred to earlier in this chapter.

8.3.6 Procurement

8.3.7 Bid assessment framework

All companies submitted a bid assessment framework. They all refer to the principles of transparency, non-discrimination and proportionality. Five companies receive a grade B, the highest grade possible for this question. Nine companies receive grade C and three receive a grade D.

What distinguishes companies from each other is the level of evidence provided to support their claims. Companies that receive a grade B meet all the best practice recommendations and include all the key principles. Companies that receive a grade D fall significantly short of demonstrating these key principles and also lack detail on the information parties have to provide, how they will assess bids or appeals and how they aim to assess in-house and third-party options equally.

Furthermore, many companies provide little or no evidence on how they will handle commercially sensitive information provided by third parties.

8.3.8 Direct procurement for customers

We are disappointed with most companies' responses to the opportunities from direct procurement. Although the threshold assessment, which identifies large-scale enhancement projects expected to cost over £100 million based on whole-life totex, is generally applied well, numerous projects are rejected by companies either for technical reasons (inadequate separation from other assets, for example) or lower comparable value for money for customers, in either case without providing sufficient evidence or convincing reasons. There is also evidence that companies have not evaluated the value for money using consistent approach between in-house and direct procurement for customers options.

Examples of good practice

United Utilities provides an example of good practice in value for money assessment. The company followed the HM Treasury Five Case Model and prepared a sufficiently well-developed assessment for the Manchester & Pennines Resilience scheme.

The company worked up a set of project costs using its own knowledge and also liaised with Tier 1 suppliers to test its assumptions further. These costs were then

reviewed by cost consultants. In addition, the company provides a good financial case with well-developed net present value (NPV) analysis, which considered a range of sensitivities.

Examples of areas where improvement is required

We expect companies to present evidence of the decision making process by which they evaluate all projects, to provide confidence that schemes have been tested against appropriate criteria. We expect this even if a company believes direct procurement for customers will not apply to them because they will not meet the £100 million threshold, as is the case with South Staffs Water.

In particular, Bristol Water and SES Water should implement this practice when assessing future schemes.

There are notable issues in preparing meaningful technical and value for money assessments. Yorkshire Water and Northumbrian Water both identify schemes for direct procurement for customers which are then rejected on technical grounds, without providing good evidence that a scheme is not sufficiently discrete. Companies should also consider appropriate assurance in support of their decisions.

Southern Water identifies one scheme for direct procurement for customers which passes both threshold and technical tests, but which is then not supported by a sufficiently well-developed value for money assessment. We expect companies to provide a value for money assessment using a best-practice approach such as the Five Case Model. Furthermore, we expect that when companies prepare the financial assessment as part of the Five Case Model, it should include comparative NPV analysis of both direct procurement for customers and in-house delivery options.

8.4 Test area grades

The individual grades for the test questions and the test area grade for controls, markets and innovation overall, are presented for each company in the table below.

Figure 8.1: Results of the targeted controls, markets and innovation assessment

Question	Water and sewerage companies											Water only companies					
	Anglian Water	Dŵr Cymru	Hafren Dyfrdwy	Northumbrian Water	Severn Trent Water	South West Water	Southern Water	Thames Water	United Utilities	Wessex Water	Yorkshire Water	Affinity Water	Bristol Water	Portsmouth Water	South East Water	South Staffs Water	SES Water
CMI test area	B	C	C	C	C	C	C	C	B	B	B	C	C	C	B	C	C
CMI1	B	B	C	B	B	C	C	C	A	C	C	D	B	C	B	D	C
CMI2	B	B	C	C	B	C	B	C	B	B	C	D	C	C	C	C	D
CMI3	B	C	C	D	B	A	D	C	B	B	B	D	C	C	B	B	C
CMI4	C	C	N/A	C	C	C	C	C	C	C	B	N/A	N/A	N/A	N/A	N/A	N/A
CMI5	B	B	B	B	B	B	B	C	C	B	B	B	B	B	B	B	B
CMI6	C	C	D	C	D	B	C	B	B	C	B	B	C	C	C	D	C
CMI7	C	C	C	D	C	C	D	C	B	C	D	D	D	C	C	C	D

9 Test area assessment: Securing cost efficiency

9.1 Why assess cost efficiency?

Residential customers are dependent on their water company – they cannot choose their supplier. It is vital that companies take action to drive efficiency into their businesses, and that business plans are efficient and demonstrate that companies are providing value for money to their customers – customers should not pay extra for inefficient services.

At PR14, we introduced a totex and outcomes framework. The framework gives companies the flexibility to decide how best to deliver their services, and to come up with the most cost-efficient and innovative solutions. Since the introduction of the new framework we have seen evidence of greater cost outperformance by regulated companies as well as real life examples of companies substituting capex with lower-cost opex solutions.[14]

The totex and outcomes framework, along with a focus on innovation and the greater use of markets at PR19, all offer significant scope for companies to reduce costs. Consistent with that, we have set out in our PR19 methodology that we expect company business plans to show a step change in efficiency, relative to past periods.

There is emerging evidence in business plans that some companies have challenged themselves and stepped up their efficiency, particularly related to the costs they projected for base (on-going) expenditure. However, there is still considerable distance for some companies to go. We are expecting them to do better in revised plans.

To come to our view of efficient base costs our initial benchmark is “upper quartile” performance within the sector. Such a benchmark provides an efficiency challenge to 75% of the water companies to catch up with the top 25% of companies in the sector. We look beyond the water sector as well. We apply further stretch to our view of costs based on evidence of ongoing productivity improvement in the wider economy as well as evidence of the efficiency gains from the totex and outcomes framework.

[14] Supplementary technical appendix: KPMG totex and outcomes report

Companies submit significant enhancement proposals in their business plans – proposals to improve the quality of service, environmental outcomes, or to provide for population growth within a company area. These proposals are significantly higher than at PR14. This is driven in part by a relatively large programme to meet environmental obligations set by the environment regulators in England and Wales. It is also driven by the need to address drinking water supply-demand balance deficits due to population growth, sustainability reductions in the amount companies can abstract from the environment, and climate change.

Enhancement investment is important for current and future customers, and for the environment. We consider these proposals carefully. When assessing enhancement proposals we use benchmarking analysis and company evidence. We assess how well companies demonstrate the need for their proposed investment, their choice of preferred options and how customers are protected if they fail to deliver the investment. We challenge these proposals where we consider that the evidence is not sufficient. Companies should provide compelling evidence of need, efficiency and customer protection to support their proposals in the revised plans.

As part of PR19, we scrutinise the efficiency of companies' projected costs in their business plan. We set out an efficient cost allowance for each company for the period 2020 to 2025. In the box in section 9.2.1 we set out our assessment approach and efficiency challenge. 'Annex 3: Cost tables' includes cost tables of business plan totex relative to our view of efficient totex for each company.

Our cost allowances for companies play a key role in determining current and future bills. Close scrutiny of companies' proposed programmes of work and the efficient delivery of this work is vitally important for affordability, to ensure that customers do not pay for inefficiency.

9.2 Our approach

Our assessment of business plans in the area of cost efficiency considers four questions.

Question 1 – wholesale water cost efficiency: How well evidenced, efficient and challenging are the company's forecasts of wholesale water expenditure, including water resources costs?

Question 2 – wholesale wastewater cost efficiency: How well evidenced, efficient and challenging are the company's forecasts of wholesale wastewater expenditure, including bioresources costs?

Question 3 – residential retail cost efficiency: How well evidenced, efficient and challenging are the company's forecasts of retail expenditure, including bad debt costs?

Question 4 – cost adjustment claims: To what extent are cost adjustment claims used only where prudent and appropriate, and where they are used, are costs adjustments well evidenced, efficient and challenging?

For questions 1-3, we compare our view of efficient total expenditure (totex) to the totex proposals in companies' business plans. We set out our approach to developing our view of efficient costs in the box below. Proposals that look efficient relative to our view of totex receive a high grade, and those that look inefficient (that is, significantly higher than our view of totex) receive a low grade.

Our grade for each question is calculated as follows:

A: company totex is more than 5% more efficient than our view of totex;
B: company totex is up to 5% less efficient that our view
C: company totex is up to 20% less efficient than our view; and
D: company totex is more than 20% less efficient than our view.

For question 4, we consider the quality of companies' cost adjustment claims. We said in our price review methodology that there would be a high evidential bar for companies to meet before we accept a claim and make a special cost adjustment to our view of costs. Based on the quality of evidence against a number of different criteria, such as whether the cost adjustment is needed, whether the proposals include evidence of efficient costs etc., we score each claim as pass; marginal pass; partial pass, or fail.

The overall test question grade takes into account the number and quality of the claims. The test is designed such that the more claims companies submit, the more likely they are to get a low grade. This provides companies a disincentive to submit unwarranted and/or poorly evidenced claims. Companies that perform well have submitted few or no cost claims, or well targeted and high-quality claims.

9.2.1 Aggregation approach

Our overall test area grade is an in-the-round assessment, taking into account each of the test question grades. We place the greatest weight on questions 1-3 and the overall level of efficiency of the company (total company efficiency combines the efficiency of wholesale water, wholesale wastewater and residential retail).

Our cost assessment approach

To understand our approach it is useful to distinguish between two types of cost:

- Base costs – day to day costs incurred in maintaining the current level of service. Base costs consist of operating expenditure and capital maintenance expenditure.

- Enhancement costs – costs to make a step change in the level of service or to meet new environmental obligations. These costs are largely capital costs.

An important element of our approach to cost assessment is the use of comparative assessment to identify companies that are efficient. The efficient companies provide a benchmark when setting efficient cost baselines for the sector. For both types of costs we use comparative assessment (benchmarking) where appropriate.

For base costs, we use econometric models to carry out a comparative efficiency assessment of the sector. In March 2018 we consulted on a range of potential cost models, having previously worked in conjunction with the industry to develop and refine our data and tools for cost assessment. Our econometric models account for the assessment of about 70% of total costs.

To set our efficient view of base costs, we consider evidence from inside and outside the sector.

Our comparative assessment allows us to identify those companies that are relatively efficient. We use the performance of the most efficient companies as a benchmark. We expect the rest of the companies to catch up. Due to the limitations of statistical analysis our benchmark is set at the “upper quartile” level of efficiency. That is, a level that 25% of companies have already achieved and 75% of companies are lagging behind.

We also look beyond the sector. We expect water companies to be as efficient as other leading businesses. It is therefore relevant to reflect wider economic performance in cost allowances. We commissioned Europe Economics to examine cost performance trends in the wider economy, and KPMG to consider the potential implications of our recent regulatory changes to cost performance. We apply a further efficiency challenge of 1.5% annually to reflect their findings. For enhancement costs, we use a number of approaches to assess and challenge proposals. Where appropriate we use comparative assessment (e.g. econometric

modelling or unit cost benchmarking). Unlike with base costs, where our comparative assessment is based on actual cost performance, for some areas of enhancement our benchmarking is based on forecast cost as provided in company business plans. This is appropriate, for example, where historical costs are not a good predictor of future costs, or where the activity is new and therefore there is no historical cost data.

For large investment proposals, we consider carefully the evidence the company provides in its business plan for its proposed programmes of work. We expect companies to provide strong evidence of need and cost benefit analysis to support their investment programmes, and to consider regional solutions and the long term.

As part of our methodology, companies also raise cost adjustment claims where they consider that they have unique or atypical material costs, which would not be adequately captured in benchmarking. We consider these claims and make efficient allowances where appropriate, which increases our view of efficient costs for the company.

Our assessment of all components above results in our view of efficient total costs (totex) for each company for the period 2020-21 to 2024-25.

9.3 Key findings

9.3.1 Cost efficiency

Our assessment of business plan efficiency finds that some companies have stepped up their efficiency in relation to base costs. However, there is still considerable distance for some companies to go.

Companies have included significant enhancement proposals in business plans. We challenged these proposal on the basis of efficiency and lack of supporting evidence. It is mainly due to the large enhancement proposals that none of the companies received an A grade in wholesale costs. Three companies received an A grade in retail costs. These companies' cost projections were over 5% lower than our view of efficient costs.

At the aggregate company level, five companies receive a B grade, seven companies receive a C grade and five companies receive a D grade.

Examples of good practice

- United Utilities provide a high quality plan and made strides towards cost efficiency compared to the last price review.
- Severn Trent provide stretching forecasts of base costs.
- Southern Water provide a high quality plan and ambitious cost forecasts for its residential retail service. The plan sets out its 'retail transformation programme' for PR19. For Southern Water this plan and cost forecasts show a commitment to change. Yorkshire Water submits the most efficient plan in residential retail, continuing a track record of efficiency in this service.

Examples where improvement is required

- Anglian Water, Thames Water, Yorkshire Water and SES Water provide inefficient cost projections. This is particularly noticeable in base costs where we have seen a trend towards further efficiency and a field that has, in many cases, challenged itself.

9.3.2 Cost adjustment claims

Companies submit 63 cost adjustment claims. The average number of claims is five per water and sewerage company and two per water only company. Northumbrian Water is the only company not to submit any cost claims.

In most cases we do not make a cost adjustment for a cost claim. For many claims we consider that our totex allowance already includes an efficient allowance against the requested costs and no further adjustment is required. Many cost claims provide insufficient evidence to support either the need to make a special adjustment, the options considered for the investment or the efficiency of the costs claimed. Out of 63 claims, thirteen claims receive either a 'pass' or a 'marginal pass'; 25 receive a 'partial pass'; and 25 receive a 'fail'. Our scoring methodology, combined with our high evidential bar, means that there is a high correlation between poor scores on this test and the number of cost claims submitted.

Examples of good practice

United Utilities submit a claim for additional retail costs associated with high levels of deprivation. The claim is well evidenced. There is a strong theoretical argument for why deprivation is outside of management control backed up by a range of

evidence, including cross sector evidence. The company uses a range of models and benchmarking approaches to calculate the value of its claim.
Examples where improvement is required Yorkshire Water submit a high value claim (£103 million) for increased costs to protect customers from sewer flooding on the grounds that it serves atypically high numbers of properties with cellars. However, the evidence for the number of cellared properties is based on a 1989 survey of properties that had experienced flooding from either water or sewage. Yorkshire's customers make up only 0.5% of the survey respondents and there is no evidence that the survey is representative of the company or the industry as a whole. Anglian Water proposes extensive investment, costing more than 35% of its total water enhancement programme, to connect its water resource zones through large interconnectors. The supporting evidence does not provide a clear breakdown of the proposed expenditure between the projects it describes, despite the high cost of the proposed investment.

9.4 Test area grades

The individual grades for each of our IAP test questions are presented in the table below. We also present the grade on the efficiency of business plan forecasts in aggregate; that is, for wholesale water, wholesale wastewater and residential retail combined.

Figure 9.1: Results of the securing cost efficiency assessment

Question	Water and sewerage companies											Water only companies					
	Anglian Water	Dŵr Cymru	Hafren Dyfrdwy	Northumbrian Water	Severn Trent Water	South West Water	Southern Water	Thames Water	United Utilities	Wessex Water	Yorkshire Water	Affinity Water	Bristol Water	Portsmouth Water	South East Water	South Staffs Water	SES Water
CE test area	**D**	**D**	**B**	**C**	**B**	**B**	**D**	**D**	**B**	**C**	**C**	**C**	**C**	**B**	**C**	**C**	**D**
CE1	D	D	B	C	C	B	D	D	B	C	D	C	C	B	D	D	C
CE2	C	C	B	D	B	C	D	C	C	C	D	N/A	N/A	N/A	N/A	N/A	N/A
CE3	B	D	B	C	A	C	A	D	B	C	A	D	C	C	B	B	D
CE4	A	B	A	A	D	C	B	D	C	C	C	D	D	A	C	A	A

For more information please see ‘Technical appendix 2: Securing cost efficiency’.

10 Test area assessment: Aligning risk and return

10.1 Why assess risk and return?

Our approach to 'aligning risk and return', now and in the long term, supports the key themes of PR19. Our PR19 methodology incentivises all companies to improve their performance by aligning the interests of companies and investors with those of customers. This is so companies can push boundaries with their performance and improve customer service, while maintaining resilient services and affordable bills.

We aim to achieve this by making sure efficient companies can continue to finance their functions, and invest in resilient services, by earning a reasonable return that reflects the risks they face. Our approach aims to keep bills affordable by assessing whether company plans appropriately balance the recovery of costs between current and future customers.

The allowed cost of capital is an important component of overall allowed revenue and the customer bill. It is necessary to provide debt and equity investors with a return proportionate to the level of risk in the investment. If the allowed cost of capital is too high, customers may face higher bills than they should, and company profits may be seen as excessive. The legitimacy of the regulatory regime could also be called into question. If the allowed cost of capital is set too low, the ability of companies to raise the finance they need to deliver services customers expect might be put at risk.

Companies should be able to show a clear understanding of risk, and provide clear evidence of their risk management measures. This is important for the resilience of the sector. The PR19 methodology makes limited provision for companies to propose bespoke uncertainty mechanisms to shift risk to customers. For example where there is uncertainty about the scale or scope of a particular cost item. As such mechanisms shift the balance of risk to customers, we expect proposals to include convincing evidence about what the company has and will do to manage the uncertainty, and what other options it has considered.

The PR19 methodology required each company to submit a business plan that is:

- financeable (so the company can finance its operations and secure a reasonable return on its capital); and

- supported by board assurance on the basis of both the notional[15] and actual capital structure.

A company can recover its costs during the price control period through PAYG or add them to its RCV and recover them over a longer term through RCV run-off. The choices companies make about their PAYG and RCV run-off rates can affect the financeability of the company and the affordability of bills. This is because it can alter the balance of costs paid for by customers in the short and long term. So, it is important companies give convincing evidence to support their chosen PAYG and RCV run-off rates. It's also important the affect this has on bills is supported by evidence that rates are aligned to customer preferences.

10.2 Our approach

Our assessment of risk and return considers the following four questions.

Question 1 (cost of capital and retail margins): Has the company based the separate costs of capital that underpin each of its wholesale price controls, and the net margin(s) that underpins its retail price control(s), on those we state in our early view? If not, to what extent has the company robustly justified, in terms of benefits for customers, its proposed costs of capital and retail margin(s) within the context of expected market conditions for 2020-25?

In our PR19 methodology, we set out our 'early view' for the allowed cost of capital and net retail margin(s). As part of their business plan submissions, companies were required to provide the cost of capital and the net retail margin(s) that would underpin their business plans. Where this was different to our 'early view', we assess the quality of evidence each company provided to justify its alternative proposal in terms of:

- market conditions in 2020-25;
- associated benefits which might compensate customers for any higher costs implied; and
- the support of its own customers.

Question 2 (managing risk and uncertainty – return on regulated equity (RoRE)): To what extent has the company demonstrated a clear understanding

[15] In defining an efficient company, we set a notional capital structure for all companies with a proportion of debt to total regulatory capital at 60 per cent for PR19.

and assessment of the potential risks in its RoRE assessment, including the effect of the risk management measures it will have in place, across each of the price controls?

In our PR19 methodology, we prescribed a set of scenarios for companies to use to underpin their risk analysis. We also presented the range of outcomes as a range for the RoRE, which measures earnings by owners of the company with reference to the gearing level assumed in our cost of capital. This is so we can compare earnings to our allowed cost of equity.

We expect companies to:

- explain the assumptions underpinning their analysis; and
- describe how their risk analysis takes into account the steps company management would take to mitigate downside risks.

We assess:

- whether companies provided evidence of robust analysis;
- whether companies followed our guidance for a consistent approach to RoRE calculations;
- the strength of evidence in support of risk mitigation and management measures set out in plans; and
- whether there is convincing evidence that the RoRE ranges in company plans represent a reasonable set of possible outcomes.

Where companies proposed bespoke uncertainty mechanisms, we assess whether the evidence presented was compelling. The bar for evidence about the need for uncertainty mechanisms is high.

Question 3 (financeability): Has the board provided a clear statement that its plan is financeable on both an actual and a notional basis? Is the statement appropriate and how robust is the supporting evidence?

As part of their business plan submissions, each company had to provide a clear statement that its plan is financeable on both an actual and a notional basis, with compelling supporting evidence.

We assess the evidence supporting each company's board statement about the financeability of its business plan. We consider the supporting evidence for targeted credit ratings in each company's plan according to:

- the investment needs of the company; and
- the requirement for each company to have a sufficient buffer to withstand financial shocks so the company can maintain an investment grade credit rating.

Where companies gave extra evidence or third party reports, we consider:

- their explanations of why that information is relevant; and
- how they propose to address any issues that arise out of that extra evidence.

Where companies propose adjustments to address financeability constraints on a notional basis, we assess the evidence supporting the need for the adjustments to see if they are appropriate. We also consider whether the impact on customer bills was supported by customer preferences, using evidence from the customer engagement companies used to develop their plans.

Where a company expects a financeability issue to arise on its actual company structure, we assess how the company proposes to address it and the evidence of assurance about its approach.

Question 4 (PAYG and RCV run off): How appropriate are the company's PAYG and RCV run-off rates? How well evidenced are they, including that they are consistent with customers' expectations, both now and in the longer term?

We expect companies to consider the balance of costs recovered from customers in the short and long term. Costs can be recovered through allowed revenue in one of two ways. Expenditure allowed for within price limits (totex) can be recovered in the year it is incurred through PAYG. Or it can be added to the RCV and recovered over a longer period through RCV run-off (depreciation of the RCV).

In their business plan submissions, companies had to provide details of their chosen PAYG and RCV run-off rates. We assess each company's evidence, taking account of the evidence that underpins the starting point for the calculation of the PAYG and RCV run-off rates, and any subsequent adjustments. For PAYG, we assess:

- how chosen rates compared to proposed operating and capital costs in 2020-25; and
- the evidence provided where adjustments were made, for example to smooth customer bills or address financeability.

For RCV run-off, we assess the evidence provided for the chosen rates and the supporting evidence for any adjustments. PAYG and RCV run-off rates affect the balance of bills for customers in the short and the long term. So we assess whether

the resulting bill profiles were supported by customer preferences from companies' customer engagement processes.

10.2.1 Aggregation to test area grade

For this area, we only consider grades B to D. This is because innovation and ambition are not relevant to 'aligning risk and return'. The aggregation approach for the risk and return test area limits the maximum grade a company can achieve to its lowest scoring question from questions 1, 3 and 4.

RoRE (question 2) is given less weighting in the overall assessment. However, it is important each company shows it understands the:

risks that could affect the delivery of its plans; and
the action company management needs to take to manage the risks (but this area has less direct impact on customers and their bill levels).

10.3 Key findings

In December 2017, we gave our early view of the cost of capital, the lowest in the water sector since privatisation. Twelve companies use this indicative cost of capital in their plans, which by itself drives lower bills in real terms, making bills more affordable to customers. Most also show that bill profiles for 2020-25 are consistent with customer preferences. The board of each company provides a statement that it considers the business plan to be financeable, which is important for the long-term resilience of the sector.

However, only two companies – Northumbrian Water and South West Water – give sufficient evidence to get the highest possible grade, a grade B, overall for this area. Three companies – Hafren Dyfrdwy, Wessex Water and Affinity Water – receive a grade D overall. The rest of the companies receive a grade C.

Companies generally perform worst on the assessment of financeability (question 3), which is a key driver of the overall grade.

Examples of good performance

Portsmouth Water performs well in providing high-quality supporting evidence for its proposed cost of capital – which is higher than our 'early view'. There is convincing evidence:

- that the proposed uplift reflects that there is compelling evidence that the level proposed uplift is appropriate for the company on account of its size;
- of benefits that adequately compensate customers for the higher cost of the proposal; and
- that the proposed uplift is supported by customer preferences (from a survey of their customers).

Five companies propose an alternative cost of capital. Portsmouth Water provides sufficiently convincing evidence for its request for a company-specific cost of debt adjustment. Affinity Water, Bristol Water and SES Water receive a grade C because of insufficient evidence to justify their proposed cost of capital. Wessex Water receive a grade D because it gave limited and unconvincing evidence to support a higher cost of capital which would result in higher bills for customers.

Examples of where improvement is required

Wessex Water performs poorly because of the evidence it provided to justify its proposed cost of capital – which is higher than our 'early view' and the highest of any company. Its evidence in support of the level of uplift is limited and unconvincing. There is no convincing evidence that customers will receive benefits which adequately compensate for the higher proposed cost of capital. Finally, there is no evidence that Wessex Water tested the acceptability of its higher cost of capital proposal with its customers.

Only five companies receive a grade B for managing risk and uncertainty (question 2). Hafren Dyfrdwy, Affinity Water and SES Water receive a grade D. Companies that receive a grade C generally provide insufficient evidence on risk identification, risk management or risk mitigation measures.

We are concerned that some companies assume more downside than upside risk on their outturn totex costs without sufficient justification. We are also concerned that some others assume that a greater proportion of revenue is at risk than the methodology suggests.

Examples of good performance

Yorkshire Water performs well on risk assessment and assessment of RoRE. The business plan demonstrates high quality with convincing evidence that it has done a robust assessment of the prescribed upside and downside scenarios. The plan contains a detailed risk analysis that clearly sets out the risks to the business, links

them to the prescribed scenarios and shows an understanding of the interdependence between risks. For every scenario modelled, the company identified a set of mitigating actions and their impacts.

Five companies propose bespoke uncertainty mechanisms which have been assessed in this test, including four companies that claimed for notified items[16]. In one case, there is insufficient evidence to show the proposed uncertainty mechanism has not already been addressed by the uncertainty provisions of company licences.

In most cases there is insufficient evidence to support the proposed uncertainty mechanisms or to show that they adequately protect the interest of customers. In two cases, we need more evidence to show that the claimed item will stay uncertain at the time of the final determination.

Examples of where improvement is required

Hafren Dyfrdwy's business plan is poor in its assessment of risk in the RoRE analysis. There is little evidence to show the company has sufficiently explored uncertainty around expected upside and downside risk scenarios. The business plan explains mitigation measures at a high level, with general statements about financing and cost management. So there is no evidence to show an understanding of risk and risk management in the RoRE analysis.

SES Water has requested an uncertainty mechanism related to changes of legal requirements that might already be covered by the uncertainty provisions of its licence.

Dŵr Cymru and SES Water have provided insufficient evidence to support their proposals for uncertainty mechanisms for business rates.

In some cases, there is insufficient evidence that the uncertainty could not be managed by existing risk sharing mechanisms, including the potential for early start provisions at PR24. This included a proposed uncertainty mechanism from:

- Affinity Water for sustainability reductions; and

[16] Items we identify and exclude from (or only partially include in) our determinations because of their uncertain nature, but which qualify for a possible reopening of the price determination.

- Severn Trent Water for uncertainties associated with investment because of climate change scenarios.

Companies generally fall short of high quality on financeability (question 3). Only four companies receive a grade B, and two companies – Wessex Water and Affinity Water – grade D.

Companies who receive a grade C generally fall short of high quality because:

- they did not provide sufficient and convincing evidence to support the target credit ratings; and/or
- the key financial ratios were not consistent with maintaining the target credit ratings.

Several companies did not clearly set out their process and assurance for assessing financeability. For the two companies receiving a grade D, we are unable to reconcile the financial ratios they provided to the PR19 financial model, because there was insufficient supporting evidence.

An example of good performance

United Utilities performs well on financeability. The business plan includes:

- a clear board statement supported by appropriate assurance that the plan is financeable on an actual and a notional basis;
- clear evidence to support the target credit ratings for the notional and actual structures, and evidence these were appropriate for the investment needs of the company; and
- a suite of financial metrics to support the target credit ratings over the period, with sufficient evidence to show credit ratings will be maintained throughout 2020-25.

United Utilities also identify a financeability constraint on the notional structure. This is adequately explained and the company gives supporting evidence to support the mitigation of the issue, including customer support for the impact on bills.

An example of where improvement is required

Affinity Water performs poorly on financeability. The business plan does not include adequate assurance to support the board's assessment that the company

is financeable on an actual and a notional basis. Affinity Water provides financial metrics for the notional structure which appear to be derived from a model that cannot be reconciled to Ofwat's financial model. So we have concerns about whether the ratios provided to evidence the company maintaining its target credit rating throughout 2020-25 are appropriate.

For PAYG and RCV run-off rates (question 4), eight companies receive a grade B and two companies – Hafren Dyfrdwy and Affinity Water – receive a grade D. Companies who receive a grade C generally fall short of high quality because of:

- insufficient evidence to support the starting point for PAYG or RCV run-off rates;
- insufficient evidence in support of a proposed adjustment; or
- insufficient customer support for the bill profile.

Companies that receive a grade B generally included high-quality evidence in support of the proposed approach. For the two companies that receive a grade D, there is insufficient evidence that the final bill profile is consistent with customer preferences for all customers, and CCGs raised concerns.

Examples of good performance

Anglian Water performs well and provides high-quality evidence to support PAYG and RCV run-off rates, including a report setting out a range of approaches to RCV run-off. Yorkshire Water also performs well, including setting out the calculations to support the RCV run-off rates with reference to its annual performance report and annual report and accounts.

Examples of what needs to be improved

Affinity Water and Hafren Dyfrdwy perform poorly with respect to providing evidence that PAYG and RCV run-off rates are appropriate and consistent with customer preferences. For both cases CCGs raised concerns about the final bill profile. For Hafren Dyfrdwy, CCWater also raised concerns. For Affinity Water, the business plan does not set out the approach to setting PAYG rates. And in both plans there is insufficient evidence to support the proposed PAYG or RCV run-off rates.

Our assessment finds that, in respect of the starting position for the PAYG and RCV run-off rates, there is sufficient evidence to support the starting rate for the PAYG rates in most cases. However, generally we find there is insufficient evidence to

enable us to replicate the calculations for the RCV run-off rates within the business plans.

Where companies propose adjustments to the starting rates, we expect:

- the evidence provided to be sufficient and convincing to show why the adjustment is appropriate; and
- the company's specific customer engagement to show that the adjustment aligns with customer preferences.

Although some companies provide sufficient evidence, generally this is an area that requires improvement.

In respect of the transition to the consumer price index (CPIH)[17], we find that two companies – Thames Water and Bristol Water – reversed the cashflow impact of the partial transition to CPIH indexation of the RCV. This lowers customer bills in 2020-25 and increases bills beyond this time.

Severn Trent Water proposes adjustments to RCV run-off to allow for a full transition to CPIH. Other companies base their plan on the speed of transition implied by the PR19 methodology. In some cases, there is insufficient evidence to show how the impact of the transition has been included in customer engagement on bill profiles. However, we give less weight to this in our overall assessment, as long as there is sufficient and convincing evidence from customer engagement to show the chosen bill profile aligns with customer preferences.

There is more comparative information and guidance on financeability for companies that must resubmit plans in the 'Technical appendix 3: Aligning risk and return'

10.4 Test area grades

The individual grades for the risk and return test questions, as well as the overall risk and return test area grade, are presented for each company in the table below.

[17] consumer price inflation including a measure of owner occupiers' housing costs

Figure 10.1: Results of the risk and return assessment

Question	Water and sewerage companies											Water only companies					
	Anglian Water	Dŵr Cymru	Hafren Dyfrdwy	Northumbrian Water	Severn Trent Water	South West Water	Southern Water	Thames Water	United Utilities	Wessex Water	Yorkshire Water	Affinity Water	Bristol Water	Portsmouth Water	South East Water	South Staffs Water	SES Water
R&R test area	**C**	**C**	**D**	**B**	**C**	**B**	**C**	**C**	**C**	**D**	**C**	**D**	**C**	**C**	**C**	**C**	**C**
RR1	B	B	B	B	B	B	B	B	B	D	B	C	C	B	B	B	C
RR2	C	C	D	C	C	C	B	B	C	C	B	D	C	C	B	C	D
RR3	C	C	C	B	B	B	C	C	B	D	C	D	C	C	C	C	C
RR4	B	C	D	B	C	B	C	B	C	B	B	D	C	B	C	C	B

11 Test area assessment: Accounting for past delivery

11.1 Why assess past delivery?

There are two distinct aspects of past delivery that are important for customers.

Firstly, past delivery – and how the companies assess, learn from and respond to that experience – is an important indicator of whether they will be able to deliver against their plans for 2020-25. We assess companies' past performance, the lessons learnt and the measures the company proposes to put in place to address performance issues across four key areas: outcomes, costs, major incidents handling (including response to the 2018 freeze and thaw) and customer complaints handling. Doing so enables us to assess our confidence in the companies' abilities to deliver their business plans. Assessing past performance of the companies against their outcomes performance commitments, for example, allows us to understand what more companies need to do to ensure that they can deliver their plans for customers, the environment and wider society.

Secondly, we assess whether the water companies report their actual performance accurately so that the 'reconciliations' for the previous price review determinations are correct. This ensures that customers only pay for the service that they have and will receive in 2015-20.

Our approach to accounting for past delivery supports the key themes of PR19. In our PR19 methodology we set expectations that:

- robust analysis of past delivery following the PR14 reconciliation rulebook methodology, coupled with the flexibility to smooth revenue adjustments, will support affordability;
- reconciling past performance keeps companies accountable for their performance, which will support customer service; and
- taking past performance in the round into account, when assessing the achievability of business plans, will support delivery of resilience in 2020-25.

11.2 Our approach

Our assessment of past delivery considers two questions.

Question 1 (reconciliation assessment): How well has the company given evidence for its proposed reconciliations for the 2015-20 period, and has it

proposed adjustments by following the PR14 reconciliation rulebook methodology?

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. In setting the 2019 price determinations, we will apply reconciliation adjustments to revenues for the 2020 to 2025 period and the regulatory capital value (RCV) to take account of these incentive mechanisms. We will also apply adjustments to reflect performance in the final year of the 2010 to 2015 period, which could not be fully taken into account in PR14. In 2014, we published the 'Ofwat PR14 reconciliation rulebook' (the 'reconciliation rulebook'), which set out the methodology companies should use to calculate these adjustments.

As part of their business plan submissions, companies were required to provide their proposed reconciliation adjustments and evidence to support their reconciliations. We assess whether the companies' proposed adjustments are accurate, follow the PR14 reconciliation rulebook methodology and are well supported by evidence. Companies that perform well on this test provide sufficient and convincing evidence to support their actual data for 2015-18 and forecasts for their anticipated performance in 2018-19 and 2019-20, and undertake the reconciliations consistently with the methodology in the reconciliation rulebook.

Question 2 (deliverability assessment): How well has the company performed, and is forecast to perform, over the 2015-20 period and, taking into account this overall performance, how well has it put measures in place to ensure that it maintains confidence that it can successfully deliver its PR19 business plan?

It is important not only that companies have high-quality business plans but also that customers have confidence that those business plans will be delivered. This confidence will come in part from how companies have performed in the past. What the companies have learnt from their 2015-20 performance and whether they have appropriate measures in their business plans to improve performance provides evidence for whether they can deliver for their customers in the future.

We consider past performance across four key areas:

- outcomes;
- costs (total expenditure);

- major incidents (in this area we assess environmental and water quality incidents, the response to the 2018 freeze and thaw[18] and where statutory and license obligations have not been met); and
- customer complaints handling.

In each of these four areas, we assess past and forecast performance for the 2015-20 period, whether the company identifies drivers of performance and lessons learnt, and the measures it has put in place to improve its performance. In undertaking this assessment, we draw on data from companies, the Environment Agency, the Drinking Water Inspectorate, Natural Resources Wales, CCWater and our report 'Out in the cold'.

For outcomes and cost performance, we take account of the level of stretch in the 2020-25 business plan when assessing whether the proposed improvement measures are sufficient. In this test area, we place the greatest weight on outcomes and cost performance because these will have the greatest impact on customer service and bills going forward.

Companies that perform well on this test either:

- perform strongly in the current period and their plans include appropriate measures to ensure that they continue to do so; or
- perform less well, but provide convincing evidence that they have learnt lessons and their plans include appropriate measures to ensure performance will improve in the future and they will be able to deliver their business plan.

11.2.1 Aggregation to test area grade

The overall grade for this test area is based on a combination of the grades from the two past delivery test questions. We place the greatest weight on the deliverability assessment (question 2) because this is likely to have the greatest impact on customers.

[18] In our 'Out in the cold' report, June 2018, we said we would take into account a company's past performance following the severe weather in late February and early March 2018.

11.3 Key findings

At a sector level our key finding is that, while companies have learnt from their own poor performance, they could do more to learn from their own good performance, and the performance of other companies within and beyond the sector.

Across the sector we have seen mixed performance both between companies and across areas that we examined.

Performance on outcomes is varied, with an average of 77% of outcomes met or forecast to be met for 2015-20. However some companies do not provide sufficient evidence of appropriate measures to allow them to deliver the improved performance set out in their business plan.

Past performance on costs is generally positive, with few companies forecast to overspend against their allowed revenues, although we have concerns that some companies do not provide sufficient detail of the measures they intend to introduce to allow them to deliver on their plans for 2020-25.

The story for customer complaint handling is positive overall, with more complaints being dealt with first time and a lower total number of complaints for most companies – with both measures improving at the same time for some companies.

Performance on major incidents handling is more varied, and trends are harder to identify because of the influence of weather, but there is definitely room for improvement across the sector both in avoiding incidents and in handling them when they occur.

One area where the sector has done better than previously is on submitting accurate reconciliations for 2015-20 with appropriate evidence. While there are still issues in this area for some companies, overall performance is better than for the equivalent exercise at PR14.

As a consequence of this mixed performance, the grades achieved in this test area are varied, with five companies providing sufficient evidence to receive the highest possible grade[19] – a grade B – and six receive a grade D. Companies generally perform worse on the deliverability assessment (question 2) than the reconciliation assessment (question 1). As stated above, we give more weight to the deliverability

[19] Ambition and innovation are not considered to be relevant areas for assessment in regards to past delivery, so B is the highest grade achievable for this test area.

assessment. The grades for the reconciliation assessment are not sufficiently different for any company to affect our in-the-round assessment for the test area. The test area grade is therefore the same as the grade for the deliverability assessment (question 2) for all companies.

Question 1 (reconciliation assessment)

The companies perform better on the PR14 reconciliations compared to the equivalent exercise for PR14, where we made reconciliations for the 2010-15 price review.

There are only small differences between expected[20] and proposed reconciliations. Companies generally also provide sufficient and convincing evidence to support their proposed reconciliations. There are some exceptions, such as Bristol Water, which provides insufficient evidence for a number of its PR14 reconciliations.

No companies receive a grade D for this part of the assessment. Where companies receive a grade C, this is generally as a result of detailed issues in a number of individual reconciliations. Where we have concerns we are requesting that slow track and significant scrutiny companies provide updated evidence on historical performance in their revised business plans, and update the forecasts and supporting evidence when they resubmit their reconciliations following the assessment of 2018-19 data on 15 July 2019 (although companies are welcome to submit updated forecasts with their revised business plans if they wish).

Examples of good performance

SES Water performs well on the reconciliation assessment. It provides good evidence to support its forecast performance for 2018-20 and accurately uses the required reconciliation models.

Examples where improvement is required Bristol Water provides insufficient evidence for its PR14 reconciliation over a number of areas. For example, the company provides insufficient evidence to support its forecasts for six of the nine performance commitments, land sales, service incentive mechanism, residential retail and totex. In addition, there are major data inconsistencies between the populated reconciliation models and data tables for totex, as well as minor

[20] When calculating the expected reconciliation adjustments, we have made corrections where we have identified inconsistencies between a model's input values and the business plan table values.

inconsistencies for the service incentive mechanism and the wholesale revenue forecasting incentive mechanism.

Question 2 (deliverability assessment)

In the deliverability assessment, companies tend to do a good job of explaining the drivers of their past performance. However, many companies fail to demonstrate that they have adequately identified and learnt lessons from their past performance. This in turn casts doubt on whether the measures they propose to put in place to deliver the 2020-25 plan will be sufficient.

Even where companies identify lessons from other companies, they do not translate them to their circumstances. Companies rarely identify lessons from other sectors, with their focus remaining predominantly on the water sector.

Companies that receive a grade B either have good past performance or, where they performed less well, demonstrate that they have understood the drivers of their performance, learnt lessons and their plans include appropriate measures to address them. We do not have concerns with the evidence on deliverability for these companies. However, even among the higher performers, few companies identify lessons learnt from delivering already acceptable performance. Continuous learning and improvement, even for high-performing companies, is important to ensure they maintain performance.

Where we have concerns over the evidence on deliverability we are requesting that companies develop appropriate actions plans. Where our concerns are substantial we will review these action plans and provide feedback to companies.

Examples of good performance

South Staffs Water demonstrates that it has both learnt from its past performance, and implemented effective measures to improve its performance.

After performance deteriorated following the closure of its Cambridge call centre, the company examined its performance and launched a recovery programme. This included increasing resources to reduce response time, creating a dedicated team focused on customers from the Cambridge area, and improving the use of technology.

The changes not only improved service and reduced the number of complaints by 37%, but also enabled the company to reduce expenditure.

United Utilities provides evidence that it understands the drivers of its drinking water quality incidents, and learnt lessons both from these and from the 2018 freeze and thaw. The company identifies an understanding of customers and the use of its internal control centre as important factors in dealing with incidents.

To further improve performance, the company proposes improvements to operational practices through investing in new infrastructure, increasing the use of multiple channels of communication and increasing staff training.

Companies receive a grade C where we have concerns about both their past performance and the evidence they provide – that they understand the drivers of their performance, have learnt lessons and set out appropriate measures in their business plans to ensure delivery. In general, these companies provide some evidence that supports the deliverability of the 2020-25 plan, but it is not sufficient to give us confidence in the deliverability of future performance.

Companies receive a grade D where we have substantial concerns about the deliverability of the 2020-25 plan. In some cases, this is because there are significant past performance issues and we have substantial concerns about the evidence that the plan includes appropriate measures to address them. Southern Water's performance on incidents is an example of this.

In other cases, while past performance is acceptable, the plan provides insufficient evidence that the planned level of stretch for 2020-25 can be delivered. Hafren Dyfrdwy's plan for costs is an example of this.

Examples where improvement is required

Southern Water was prosecuted by the Environment Agency and/or the Drinking Water Inspectorate four times in 2015-18. It was required to provide an externally assured action plan following the freeze and thaw review. It also performs badly compared to other companies in terms of category 1 and 2 pollution incidents per 10,000 kilometres of sewers (only two companies perform worse on this metric). Although the company learnt lessons from the 2018 freeze and thaw incident, it does not provide sufficient evidence it has learnt lessons from its pollution incidents.

Southern Water provides insufficient evidence that it has measures in place to improve performance in relation to incidents. For example, it aims to co-ordinate incident response with neighbouring companies, but fails to provide sufficient detail on how it will do this. We therefore have concerns about the deliverability of incident management in the future.

Hafren Dyfrdwy forecasts that it will spend below its wholesale cost allowances for 2015-20. However, this on its own is not sufficient evidence that the company's cost plan for 2020-25, which includes a stretching efficiency challenge, is deliverable. The plan includes little evidence on how the planned cost reductions will be delivered, and instead it discusses Severn Trent Water's cost plan, which is only partially relevant following the variation of appointments of Severn Trent Water and Dee Valley Water to form Severn Trent Water and Hafren Dyfrdwy[21].

11.4 Test area grades

The individual grades for the reconciliation assessment and deliverability assessment, and the test area grade for past delivery overall, are presented for each company in the table below.

[21] For more information see 'Variation of Severn Trent Water Limited's appointment to include the Chester Site and variation of Dee Valley Water Limited's appointment to include the Powys site'.

Figure 11.1: Results of the accounting for past delivery assessment

Question	Water and sewerage companies											Water only companies					
	Anglian Water	Dŵr Cymru	Hafren Dyfrdwy	Northumbrian Water	Severn Trent Water	South West Water	Southern Water	Thames Water	United Utilities	Wessex Water	Yorkshire Water	Affinity Water	Bristol Water	Portsmouth Water	South East Water	South Staffs Water	SES Water
PD test area	B	C	D	C	B	D	D	D	B	B	B	C	D	C	D	B	B
PD1	B	B	C	B	C	B	B	B	B	B	C	B	C	C	C	B	B
PD2	B	C	D	C	B	D	D	D	B	B	B	C	D	C	D	B	B

12 Test area assessment: Securing confidence and assurance

12.1 Why assess securing confidence and assurance?

It is vital that customers and stakeholders, including Ofwat, have confidence in water companies' business plans. The securing confidence and assurance test considers three elements that assess this.

- Board assurance: a company's full Board should provide assurance of the business plan. This includes ensuring that the business plan is of high quality in the round, and reflects the views of customers. We expect company Boards to own and be accountable for their plans.
- A fair balance between customers and investors: companies should be able to demonstrate to customers and stakeholders that there is a fair balance between customers and investors, including meeting the expectations of our 'Putting the sector in balance' position statement.
- High quality, consistent and assured data: a business plan can only be high quality when the data and information presented in the plan is consistent and accurate. Assurance that data is high quality and consistent is an important element of our assessment.

Our approach to securing confidence and assurance supports the key themes of PR19. In our PR19 methodology, we set expectations that Boards demonstrate their accountability for delivering the key themes by providing assurance statements on, for example:

- resilience: Board governance and assurance processes will deliver long-term resilience in the round;
- customer service: the business plan will deliver – and the Board will monitor – outcome delivery; and
- affordability: the plan is affordable for all, in the long term, and includes appropriate assistance for those struggling – or at risk of struggling – to pay.

Additionally, our proposals in 'Putting the sector in balance' align the interests of company management and investors with those of customers, and encourage companies to share benefits from outperformance. This will help to deliver customer service and affordability.

12.2 Our approach

The securing confidence and assurance test area considers six questions.

Question 1: To what extent has the company's full Board provided comprehensive assurance to demonstrate that all the elements add up to a business plan that is high quality and deliverable, and that it has challenged management to ensure this is the case?

We ask for statements of assurance to demonstrate that Boards are accountable for their business plans and business planning processes.

In the PR19 methodology, we specified that Boards should provide statements on business planning, customer engagement, affordability, outcomes, resilience, cost efficiency, risk and return, and financeability. We ask companies to provide sufficient evidence that their Boards have satisfied themselves on the topic of each statement. Additionally, for statements on business planning, we asked companies to provide sufficient evidence that their Boards have also challenged management on the topic of each statement.

We assess whether the Board assurance statements address the requirements of the PR19 methodology. Compliant statements provide assurance on all material components requested.

In our assessment of whether Boards have satisfied themselves, we seek sufficient evidence that the Board or its members have considered information on the topic of each statement. To demonstrate Board challenge, we seek sufficient evidence of interactions between the Board or its members and company management on the topic of each statement.

Companies that perform well on this test question provide the majority of the Board assurance statements we ask for, supported by sufficient and convincing evidence.

Question 2: To what extent has the company's full Board been able to demonstrate that its governance and assurance processes will deliver operational, financial and corporate resilience over the next control period and the long term?

Companies' business plans should deliver long-term resilience in the round. We ask Boards to demonstrate that they are accountable for this by providing assurance that they will use their governance and assurance processes to deliver operational, financial and corporate resilience over the next control period and the long term.

Companies that perform well on this test question provide a compliant statement of assurance from their Board and demonstrate that the Board or its members have considered its governance and assurance processes, and the role of those processes in delivering resilience.

Question 3: To what extent has the company's full Board provided assurance that the company's business plan will enable customers' trust and confidence, through appropriate measures to provide a fair balance between customers and investors (which include outperformance sharing, dividend policies and any performance related element of executive pay) and high levels of transparency and engagement on issues that matter to customers (which extends to their ability to understand corporate and financial structures and how they relate to its long-term resilience)?

Companies should be able to demonstrate to customers and stakeholders that there is a fair balance between customers and investors, including meeting the requirements of our 'Putting the sector in balance' position statement. The position statement sets out that companies:

- with gearing levels materially above our notional assumption should propose outperformance sharing mechanisms that allow customers to share in the returns achieved by equity investors from high gearing (proposed mechanisms should deliver benefits for customers in the round equivalent to or greater than our default mechanism);
- with gearing below the 70% trigger threshold should consider the steps they will take in the event that they carry out a future restructuring that increases gearing above the threshold. Proposals should deliver benefits for customers in the round equivalent to or greater than our default mechanism;
- should set out their dividend policies for 2020-25 and explain how these take account of delivery for customers over the period of the price control; and
- should set out their policies for performance-related executive pay transparently for customers and wider society. Policies should demonstrate:
    - a substantial link to stretching performance delivery for customers; and
    - how they will be rigorously applied.

As set out in our position statement, we also seek evidence that:

- Boards have provided assurance that the company has engaged or will engage with customers on its corporate and financial structures. This assurance:
    - should be supported by evidence that the Board or its members have considered information on this topic;

- is more important for companies that are – or are forecast to be – highly geared; and
- the company has demonstrated transparency on its corporate and financial structures and how these relate to its resilience.

Companies can demonstrate ambition, and therefore be awarded a grade A on this test question if they propose voluntary shareholder-funded sharing of returns with customers, and are otherwise high quality across other areas of this test question. The returns need to be sufficiently large in the context of the company's size. Our assessment takes into account contributions to both new schemes and existing affordability support schemes (such as social tariffs). This additional benefit sharing is not a mandated part of our PR19 methodology.

Companies that perform well on this test question provide high-quality plans that meet the expectations set out in our position statement.

Question 4: To what extent has the company's full Board provided comprehensive assurance to demonstrate that the business plan will deliver – and that the Board will monitor delivery of – its outcomes (which should meet relevant statutory and licence obligations and take account of the UK and Welsh Governments' strategic policy statements)?

We expect company Boards to be accountable for the services they deliver to customers. In the PR19 methodology, we ask Boards to demonstrate their accountability by providing assurance that they will monitor the delivery of the company's outcomes.

Companies that perform well on this test question provide a compliant statement of assurance from their Board that they will monitor the delivery of their outcomes, and provide sufficient and convincing evidence of how they will do this.

Question 5: To what extent does the company have a good track record of producing high-quality data, taking into account the company's data submission, assurance process and statement of high quality, and our 2018 assessment of the company under the company monitoring framework?

We expect companies to provide high quality data and that they will put in place sufficient assurance to ensure they can provide high quality data. Companies that provide high quality information demonstrate that they take the quality of this information and its assurance and governance processes seriously– − promoting greater trust and confidence. This test question considers:

- companies' assessments in the 2018 company monitoring framework (not including elements related to the PR19 business plans);
- consistency between companies' business plan data and their 2017-18 annual performance report submissions;
- evidence of plans and processes for producing and assuring high quality data; and
- evidence of lessons learnt from companies' 2017 company monitoring framework categorisations.

Companies that perform well on this test question meet expectations in most, if not all, of our assessments in the 2018 company monitoring framework (not including the elements related to the PR19 business plans) by a clear margin, with evidence of exceeding expectations and minimal areas of concern. They also submit consistent data and demonstrate that they have good assurance, audit and governance processes.

Question 6: How consistent, accurate and assured are the company's PR19 business plan tables, including the allocation of costs between business units, information on corporation tax, and the assurance and commentary provided?

Our 'in the round' assessment of business plan data tables for this question places the greatest weight on the consistency, accuracy and assurance of each company's data in the priority areas of cost assessment, outcomes, financial modelling and risk and return data tables. It also considers the number of material and minor issues identified in these and the remaining data tables.

Companies that perform well on this test question provide high-quality data across the majority of their data tables with relatively few issues identified in the priority data areas.

12.2.1 Aggregation to test area grade

Questions 1, 3 and 5 are the most important because they directly address the purpose of the test area. We therefore assign these questions the greatest weight in determining the test area grade.

12.3 Key findings

Performance in the securing confidence and assurance test area overall is mixed.

Some companies step up to our requirements in this area. Dŵr Cymru's plan demonstrates high quality, meeting our requirements across the test area and proposes an ambitious package of voluntary benefit sharing. Severn Trent Water, United Utilities and South East Water put forward high-quality plans.

However, most companies fall short of high quality. Two companies, Anglian Water and SES Water, fall significantly short of high quality, and do not provide the vast majority of the Board assurance statements required.

Most companies have improved the quality of their data compared to the last price review and provide high quality business plan data tables that are consistent, accurate and assured (question 6).

Examples of good practice

On its process for deriving tax forecasts, Yorkshire Water provides a copy of a report prepared by an external auditor, which sets out the procedures followed and the findings.

Affinity Water provides an assurance letter from its external auditor, which confirms it has reviewed the tax information and provides a brief summary of the work performed.

Examples where improvement is required

South East Water advises that its tax forecasts have been subject to internal assurance, but provides no information on the work performed or the findings.

Portsmouth Water provides a report from an external auditor which details the procedures carried out on the tax information and the findings. The procedures reflect a simple consistency check of values between the data table and the financial model and not a review and challenge of the high-level assumptions and methodology used to derive the forecasts.

Most companies provide assurance that their Boards will monitor outcome delivery (question 4). Most companies perform poorly on providing assurance that Board governance and assurance processes will deliver resilience (question 2). Performance across the remaining three questions – which have more influence on the overall test area grade – is mixed.

The provision of Board assurance on business plans and business planning processes (question 1) is mixed. Most companies provide most of the assurance statements requested. Only a few companies provide the vast majority of statements and support each with evidence that the Board has challenged management and/or satisfied itself on the topic of each statement. There are some statements that are provided by most companies' Boards: for example, that plans are high quality and deliverable and that they have been informed by customer engagement. However fewer than half of companies' Boards provide assurance in full that 'large investment proposals are robust and deliverable, a proper assessment of options has taken place, and the option proposed is the best one for customers'. Generally companies demonstrate that Boards have satisfied themselves, for example through records of topics discussed at Board meetings or lists of papers considered by the Board. Fewer companies demonstrate that Boards have challenged management, for example through a record of deep dives conducted between Board members and management. For companies whose plans are categorised as slow track or significant scrutiny in our initial assessment, we are requesting that they provide forward looking Board assurance statements, which they are yet to provide in full.

Examples of good practice

Dŵr Cymru's Board provides, in full, all but one of the Board assurance statements set out in the PR19 methodology. To demonstrate that it has challenged management and satisfied itself, the company provides details of challenges made by the Board and Board meeting items, and within its assurance statement, the Board advises how and why it is satisfied prior to making each statement. This evidence is sufficient for the majority of statements the Board provides.

Examples where improvement is required

SES Water's Board provides a minority of compliant assurance statements.

Anglian Water's Board provides a signed statement containing only a minority of the statements we set out. There is insufficient evidence to demonstrate that the Board itself provided the remaining statements.

The Boards of both companies do not provide compliant statements on affordability, outcomes, resilience, cost efficiency, risk and return, or financeability. For both SES Water and Anglian Water, this substantially reduces our confidence in the assurance of the plan and raises concerns over Board ownership.

Performance is also mixed on providing a fair balance between customers and investors (question 3). All business plans propose nominal base dividend yields below 5%. Most companies also commit to make voluntary contributions to financial support schemes (for instance social tariffs), with some proposing community funds which fund a wider range of causes. Some companies propose mechanisms which share a proportion of profits from specific areas of our price control (for instance outcomes) or total profits. Eight companies proposed a voluntary sharing package which was high quality, and three of these (Dŵr Cymru, United Utilities, and South West Water) are particularly ambitious in terms of the amount of sharing in the context of the company's size.

Two companies, Dŵr Cymru and United Utilities, provide high-quality plans in the areas set out in our 'Putting the sector in balance' position statement and propose ambitious voluntary sharing mechanisms. We award both companies an A grade for this test question.

Most companies provide policies on dividends and executive pay that reference the elements listed in our 'Putting the sector in balance' position statement. However on executive pay a number of companies' plans do not provide sufficient evidence to demonstrate that targets are stretching and how policies will be applied and monitored. On dividend policies most companies state that they will be transparent but some fail to make commitments to publish details in their annual performance reports and signal changes to stakeholders. All companies have more to do in both of these areas to deliver the best outcomes for customers. Additionally, although most companies accept our default gearing benefit sharing mechanism some companies with high gearing do not, in particular Thames Water and Yorkshire Water.

Examples of good practice

United Utilities' plan demonstrates high quality and ambition in its approach to aligning the interests of the company and its investors with customers. The company voluntarily proposes to increase shareholder support for affordability measures and to match dividends above a certain threshold with donations to its community fund. We estimate that the total level of sharing is ambitious. The contributions to the community fund will be allocated to support customers and community projects following consultation with its CCG, consumer panel and other stakeholder groups. Additionally, the company provides sufficient evidence that it is committed to meeting the expectations in our position statement on executive pay and dividend policy. On executive pay, there is a clear commitment to meet the expectations of 'Putting the sector in balance' into its new remuneration policy,

which will be formally put to shareholders for approval in 2019. On dividends, the company clearly sets out how the different factors of the policy will be taken into account when determining dividends. It also quantifies the maximum outperformance dividend available and commits to a threshold over which outperformance will be shared with customers.

South West Water proposes a high quality and ambitious voluntary mechanism, WaterShare+, to share some historic outperformance on the cost of debt due to more favourable market conditions than assumed in its PR09 final determinations, and is making contributions to hardship funds. We estimate that the total level of sharing is ambitious. The allocation of sharing payments will be informed by research on customer preferences. The company is also proposing to offer its customers participation in an innovative new share ownership scheme, conferring benefits similar to those enjoyed by current shareholders.

Examples where improvement is required

Thames Water is currently highly geared, and forecasts high gearing throughout the 2020-25 period, but it does not commit to introducing a gearing outperformance benefit sharing mechanism.

The company's proposals on executive pay lack sufficient evidence in key areas to demonstrate that it will comply with the requirements of our 'Putting the sector in balance' position statement on, for example:

how it will ensure targets are stretching;
how targets will influence pay;
how the policy will be applied and monitored; and
how changes and the reasoning for them will be set out in its annual performance reports.

On dividend policy, the company provides insufficient evidence that the proposed policy for 2020-25 takes account of delivery of obligations and commitments to customers and other stakeholders.

Yorkshire Water is currently highly geared and forecasts high gearing throughout the 2020-25 period. The company does not commit to a gearing outperformance benefit sharing mechanism which provides customers with equivalent benefits to our default mechanism. The company's proposal allows it to offset any calculated sharing payments against reinvested outperformance from the previous period and

social tariff contributions, so the mechanism is unlikely to provide net benefits to customers.

Performance on demonstrating a track record of high quality data (question 5) is also mixed and is mainly driven by varying performance in our assessments in the 2018 company monitoring framework prior to business plan submission.

For the test area overall, an A grade reflects that a company's business plan proposals in all of the test questions are high quality and it proposes an ambitious voluntary sharing mechanism.

Companies that receive a grade B for this test area provide high-quality plans in at least two of the most influential test questions – questions 1, 3 and 5 – or are high quality in one of these high priority test questions and provide high-quality plans in the majority of the remaining questions.

Companies that receive a grade C for this test area provide plans that fall short of high quality in at least two of the high priority questions.

Companies that receive a grade D for this test area fall significantly short of high quality in two of the high priority questions and, critically, they fail to demonstrate Board accountability for their plans by failing to provide the vast majority of assurance statements we ask for in the PR19 methodology.

12.4 Test area grades

The individual grades for the test questions and the test area grade for securing confidence and assurance overall, are presented for each company in the table below.

Figure 12.1: Results of the securing confidence and assurance assessment

Question	Water and sewerage companies											Water only companies					
	Anglian Water	Dŵr Cymru	Hafren Dyfrdwy	Northumbrian Water	Severn Trent Water	South West Water	Southern Water	Thames Water	United Utilities	Wessex Water	Yorkshire Water	Affinity Water	Bristol Water	Portsmouth Water	South East Water	South Staffs Water	SES Water
CA test area	D	A	C	C	B	C	C	C	B	C	C	C	C	C	B	C	D
CA1	D	B	C	C	B	C	C	C	C	C	C	C	C	C	B	B	D
CA2	D	B	C	D	C	D	B	D	C	D	D	C	D	C	C	C	D
CA3	C	A	C	C	C	C	C	D	A	C	D	B	B	C	C	C	C
CA4	D	B	D	B	B	B	B	B	B	D	B	B	C	B	C	C	D
CA5	C	B	D	C	C	C	D	C	B	C	C	C	C	C	B	C	C
CA6	B	B	C	B	B	B	B	B	B	B	B	D	B	B	C	B	B

Annex 1: Test areas and test questions

Test area	Test questions
Engaging customers	1. What is the quality of the company's customer engagement and participation and how well is it incorporated into the company's business plan and ongoing business operations?
Addressing affordability and vulnerability	1. How well has the company demonstrated that its bills are affordable and value for money for the 2020-25 period? 2. How well has the company demonstrated that its bills will be affordable and value for money beyond 2025? 3. To what extent has the company demonstrated that it has appropriate assistance options in place for those struggling, or at risk of struggling, to pay? 4. To what extent does the company identify and provide accessible support for customers in circumstances that make them vulnerable, including proposing a bespoke performance commitment related to vulnerability?
Delivering outcomes for customers	1. How appropriate, well-evidenced and stretching are the company's proposed performance commitments and service levels? 2. How appropriate and well-evidenced is the company's package of ODIs? 3. How appropriate is the company's focus on service performance in its risk/return package?
Securing long-term resilience	1. How well has the company used the best available evidence to objectively assess and prioritise the diverse range of risks and consequences of disruptions to its systems and services, and engaged effectively with customers on its assessment of these risks and consequences? 2. How well has the company objectively assessed the full range of mitigation options and selected the solutions that represent the best value for money over the long term, and have support from customers?
Targeted controls, markets and innovation	1. How well does the company's business plan demonstrate that it has the right culture for innovation which enables it, through its systems, processes and people, to deliver results for customers and the environment from innovation? How well does the company use and engage with markets to deliver greater efficiency and innovation and to enhance resilience in the provision of wholesale and retail water and wastewater services to secure value for customers, the environment and the wider economy; and to support ambitious performance for the 2020-25 period and over the longer term? 3. To what extent has the company set out a well evidenced long-term strategy for securing resilient and sustainable water resources, considering a twin track approach of supply-side and demand-side options and integrating third party options where appropriate, to meet the needs of customers and the environment in the 2020-25 period and over the longer term? 4. To what extent does the company have a well evidenced long-term strategy for delivering bioresources services, integrating an assessment of the value from the delivery of bioresources services by third parties for the 2020-25 period and over the longer term?

Test area	Test questions
	5. How appropriate is the company's proposed pre-2020 RCV allocation between water resources and water network plus – and, if relevant, between bioresources and wastewater network plus – taking into account the guidance and/or feedback we have provided? 6. To what extent has the company produced a company bid assessment framework for water resources, demand management and leakage services that demonstrates a clear commitment to the key procurement principles of transparency, equality/non-discrimination and proportionality and the best practice recommendations? 7. To what extent has the company clearly demonstrated that it has considered whether all relevant projects are technically suitable for direct procurement for customers? Where it has one or more such projects, to what extent has the company provided a well-reasoned and well-evidenced value for money assessment supporting its decision on whether or not to take forward each technically suitable project using direct procurement for customers?
Securing cost efficiency	1. How well evidenced, efficient and challenging are the company's forecasts of wholesale water expenditure, including water resources costs? 2. How well evidenced, efficient and challenging are the company's forecasts of wholesale wastewater expenditure, including bioresources costs? 3. How well evidenced, efficient and challenging are the company's forecasts of retail expenditure, including bad debt costs? 4. To what extent are cost adjustment claims used only where prudent and appropriate, and where they are used, are cost adjustments well evidenced, efficient and challenging?
Aligning risk and return	1. Has the company based the separate costs of capital that underpin each of its wholesale price controls, and the net margin(s) that underpins its retail price control(s), on those we state in our early view? If not, to what extent has the company robustly justified, in terms of benefits for customers, its proposed costs of capital and retail margin(s) within the context of expected market conditions for 2020-25? 2. To what extent has the company demonstrated a clear understanding and assessment of the potential risks in its RoRE assessment, including the effect of the risk management measures it will have in place, across each of the price controls? 3. Has the Board provided a clear statement that its plan is financeable on both an actual and a notional basis? Is the statement appropriate and how robust is the supporting evidence? 4. How appropriate are the company's PAYG and RCV run-off rates? How well evidenced are they, including that they are consistent with customers' expectations, both now and in the longer term?
Accounting for past delivery	1. How well has the company given evidence for its proposed reconciliations for the 2015-20 period, and has it proposed adjustments by following the PR14 reconciliation rulebook methodology? 2. How well has the company performed, and is forecast to perform, over the 2015-20 period and, taking into account this overall performance, how well has it put measures in place to ensure that it maintains confidence that it can successfully deliver its PR19 business plan?

Test area	Test questions
Securing confidence and assurance	1. To what extent has the company's full Board provided comprehensive assurance to demonstrate that all the elements add up to a business plan that is high quality and deliverable, and that it has challenged management to ensure this is the case? 2. To what extent has the company's full Board been able to demonstrate that its governance and assurance processes will deliver operational, financial and corporate resilience over the next control period and the long term? 4. To what extent has the company's full Board provided assurance that the company's business plan will enable customers' trust and confidence, through appropriate measures to provide a fair balance between customers and investors (which include outperformance sharing, dividend policies and any performance related element of executive pay) and high levels of transparency and engagement, on issues that matter to customers (which extends to their ability to understand corporate and financial structures and how they relate to its long-term resilience)? 3. To what extent has the company's full Board provided assurance that the company's business plan will enable customers' trust and confidence through high levels of transparency and engagement with customers, on issues that matter to customers (which extends to their ability to understand the company's corporate and financial structures and how they relate to its long-term resilience)? 4. To what extent has the company's full Board provided comprehensive assurance to demonstrate that the business plan will deliver – and that the Board will monitor delivery of – its outcomes (which should meet relevant statutory and licence obligations and take account of the UK and Welsh Governments' strategic policy statements)? 5. To what extent does the company have a good track record of producing high-quality data, taking into account the company's data submission, assurance process and statement of high quality, and our 2018 assessment of the company under the company monitoring framework? 6. How consistent, accurate and assured are the company's PR19 business plan tables, including the allocation of costs between business units, information on corporation tax, and the assurance and commentary provided?

Annex 2: Common performance commitment on vulnerability

Our proposal

This annex sets out our proposal to introduce a reputational common performance commitment for vulnerability. The purpose of the commitment is to:

- increase the reach of priority services registers; and
- make sure companies regularly check the data of customers on the register to make sure they are still getting the most appropriate service.

The performance commitment will measure:

- the number of customers in vulnerable circumstances on a company's priority services register (as a percentage of its household base); and
- the percentage of customers on the register who the company has contacted in the last two years to make sure they are still getting the right support.

Checking people are still getting the right services is important because people's circumstances often change. So the services they get need to reflect those changes to stay helpful.

Why we are doing it?

Companies' business plans included a range of measures and, in some cases, Performance Commitments to address the range of offerings, coverage and quality of service for Priority Service Register (PSR) and other vulnerable customers.

All companies proposed to increase the number of people on the register. However, we identified some specific issues.

1. There is a wide difference in the proposed reach of priority services registers. For example, proposals for 2024-25 range from registering 15% of customers to 0.2%.

2. We are not confident that every company will deliver its proposed growth for its priority services register. For example, only seven companies proposed a performance commitment to increase registered customers.

3. We are not confident companies currently have, or will maintain, up-to-date data on their priority services register membership. For example, 12 companies have checked less than 20% of data over the last two years. On the other hand, the best companies are planning to check data for all eligible customers on their register.

We are pleased the majority of companies propose performance commitments to improve the quality of service for vulnerable customers. However, the issues above create a significant geographical disparity in the service vulnerable customers can expect, and in many cases will get, from their water or wastewater company.

Policy context

In our final methodology, we did not propose introducing a common performance commitment on vulnerability. This was because no single measure could capture the complex and dynamic nature of vulnerability. We said we would consider a common performance commitment for PR24, building on our experience over PR19.

We still believe a single performance commitment cannot reflect company performance in supporting vulnerable customers. And we recognise that improving services for vulnerable customers cannot be reflected by numbers of customers on registers alone. However, improving the coverage of registers, and making sure customer data is high quality and up to date, are important foundations for improvement. They also complement companies' proposals for measuring and improving customer satisfaction with priority services. However, the inconsistency in the industry in terms of numbers of customers registered cannot be justified, particularly at the lower end. So we will step in to protect customers.

In light of the issues outlined in the previous section, we have decided that proposing a common performance commitment for vulnerability cannot wait until PR24.

Specifications of the performance commitment

Several companies put forward performance commitments to support the proposed growth of their priority services register in 2020 - 2025. All companies must now adopt a performance commitment based on the following specifications.

1. Companies should register a minimum of 7% of households by 2024-25. Companies may choose to set a level that is higher than this minimum level. When setting the new target, companies should consider the needs of customers

in vulnerable circumstances in their region by consulting available data and engaging with relevant third parties.

2. Companies should contact a minimum of 90% of registered customers every two years to make sure they are still getting the right support.

3. The performance commitment should be reputational only. If a company has already proposed a financial performance commitment, the under- and/or outperformance payments should be removed.

If a company has already proposed a performance commitment to increase the coverage of their register, they must adapt their commitment to meet the specifications above.

All companies must adopt this performance commitment before the start of AMP7 in 2020.

Company action: BSI performance commitment

Seven companies proposed they will achieve the BSI standard for 'fair, flexible and inclusive services for all' during AMP7. We consider external accreditation of this nature to deliver some customer benefits.

Of these seven companies, two proposed a performance commitment for achieving accreditation from the BSI. There is merit in there being consistency across companies in relation to the BSI standard, where companies propose this. So the other five companies must include a reputational performance commitment on achieving BSI accreditation as well. We do not consider it appropriate to require all companies to attain the accreditation because there are other ways companies can independently improve and reinforce the quality of service they provide.

Annex 3: Cost tables

The table compares business plan costs to our view of efficient costs at the four levels of aggregation we focussed on in the initial assessment. Costs are in CPIH prices of 2017/18 and exclude pension deficit recovery costs and third party costs.

Efficiency scores are defined as business plan costs over our view of costs.

Company name	Wholesale water costs (£m)			Wholesale wastewater costs (£m)			Residential retail costs (£m)			Total costs (£m)		
	Business plans	Our view	Efficiency score	Business plans	Our view	Efficiency score	Business plans	Our view	Efficiency score	Business plans	Our view	Efficiency score
Anglian Water	2,907	2,202	1.32	3,438	2,889	1.19	408	403	1.01	6,752	5,494	1.23
Hafren Dyfrdwy	119	122	0.97	25	27	0.95	13	14	0.97	158	163	0.97
Northumbrian Water	1,720	1,563	1.10	1,247	1,009	1.24	280	253	1.11	3,247	2,825	1.15
United Utilities	2,456	2,451	1.00	3,034	2,835	1.07	508	513	0.99	5,998	5,799	1.03
Southern Water	1,288	1,065	1.21	2,644	2,100	1.26	229	267	0.85	4,161	3,433	1.21
Severn Trent Water	3,172	2,833	1.12	2,960	3,070	0.96	462	490	0.94	6,594	6,393	1.03
South West Water	906	902	1.00	983	939	1.05	160	140	1.14	2,049	1,982	1.03
Thames Water	5,718	4,211	1.36	5,118	4,521	1.13	902	689	1.31	11,738	9,421	1.25
Dŵr Cymru	1,650	1,309	1.26	1,571	1,353	1.16	284	203	1.40	3,505	2,866	1.22
Wessex Water	660	602	1.10	1,584	1,374	1.15	164	145	1.13	2,408	2,121	1.14
Yorkshire Water	2,058	1,712	1.20	2,937	2,384	1.23	260	358	0.73	5,255	4,453	1.18
Affinity Water	1,439	1,294	1.11				169	139	1.22	1,608	1,433	1.12
Bristol Water	464	403	1.15				51	45	1.12	515	449	1.15

Company name	Wholesale water costs (£m)			Wholesale wastewater costs (£m)			Residential retail costs (£m)			Total costs (£m)		
	Business plans	Our view	Efficiency score	Business plans	Our view	Efficiency score	Business plans	Our view	Efficiency score	Business plans	Our view	Efficiency score
Portsmouth Water	224	232	0.97				23	22	1.07	248	254	0.98
South East Water	259	218	1.19				37	25	1.50	296	242	1.22
South Staffs Water	1,005	819	1.23				81	85	0.96	1,087	904	1.20
SES Water	600	497	1.21				59	60	0.99	660	558	1.18
Industry	26,646	22,435	1.19	25,542	22,501	1.14	4,090	3,853	1.06	56,279	48,789	1.15

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

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