

# The Water Forum Report

Our challenge to Severn Trent

September 2018

2020-2025

# Introduction

This report is designed to be read by Ofwat in conjunction with the Severn Trent business plan. In the report, we provide assurance on the quality of the customer engagement undertaken by the company in preparing its plan, the way the resulting customer insight was reflected in the plan and the scope of challenge that the Customer Challenge Group (the Water Forum) made to the company.

The report is written in a number of chapters which, together, offer a total response to the Aide Memoire that Ofwat provided to focus our activity.

It is worth noting that this report is intended to be read by Ofwat. Regulators represent a different audience, who have different needs from customers; we do not believe that the report as it stands is accessible for all customers. Consequently, we will provide targeted customer communication after the final determination.

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# Chair's Overview

**“Wow! I had no idea of what Severn Trent did and how much I can impact my water bill, but also what a difference we need to make for the grandkids.”**



This was a comment from a customer leaving a research group I attended. She isn't alone – most of us take our water for granted and largely trust our water company. The trouble is, our world is changing and water is set to become an ever more precious and critical resource. How should Severn Trent respond? How can it do even more to for its customers and build even stronger bridges to the local communities it serves? Curiosity about the opportunity to create more value for Severn Trent customers was the overriding motivation of the Water Forum.

This is our report and the result of intense engagement with Severn Trent dating back to 2016. It sets out our assurance to Ofwat on the customer engagement that Severn Trent undertook and how the views of customers have been reflected in the company's business plan submission for PR19.

## Our challenge

The Water Forum challenged very broadly. We fundamentally challenged the company's approach to customer engagement and the implementation of its programme. We challenged the customer case for investment in its infrastructure and challenged the quality of its retail proposition, especially for the vulnerable and those struggling to pay. Conscious of the rewards and penalties that were earned by the company in the current Asset Management Plan (AMP) period, we have been particularly challenging of the design of the performance framework, but also the specific targets for Performance Commitments (PCs) and Outcome Delivery Incentives (ODIs).

We were unsurprised to hear that the company found our feedback detailed, rigorous and unrelenting. Illustratively, at our last meeting before submission on 8<sup>th</sup> August, we challenged the company to redo its acceptability research to address changes to the business plan since the research had been conducted.



The company's response to challenge has been thoughtful and non-defensive. It has welcomed differing perspectives from Water Forum members who were respected for their expertise. Many challenges were accepted and actioned very quickly; one example was our challenge to set up a customer panel which was running within six weeks.

But there have been difficult discussions. We have continually challenged on environmental issues, particularly in response to the Environment Agency's Water Industry National Environment Programme (WINEP) requirements and insisted on the inclusion of an ODI on biodiversity.

On balance, we believe that our challenge has been constructive and effective. We concur with the company's view that Severn Trent customers have got a much better plan as a result of our involvement and challenge. After a great deal of work, on both sides, we have no further open issues on our challenge logs.

## Our approach

Preparing for the price review required us to consider a great deal of material and we knew careful planning was critical. We started with the end in mind; by mid 2016, our agendas were scoped right through to the end of 2018 so that our discussions coincided with key decision points in the plan development.

Our aim was to challenge the company while there was still time to incorporate changes into the plan, and so improve the proposition for customers as soon as possible. Of course, it was not possible to anticipate everything. Where necessary, we added meetings and calls to extend our challenge. Nonetheless, starting with a coherent and cohesive plan means we are confident that we have addressed the Ofwat brief in a systematic and comprehensive way.

## Expertise

In reviewing our conclusions, Ofwat can be confident that the Water Forum had the necessary skills to perform its role. We analysed the skills needed to meet your brief, and then used our analysis to recruit members to fill gaps.

New, independent members were appointed following a selection process; we were delighted with their calibre. Some brought experience from other service delivery sectors, enabling us to challenge the company from a best-practice perspective. For example, we recruited a market research expert who sits on the Market Research Society Board. Others were subject matter experts on an aspect of water. For example, we recruited an authority on climate change and resilience.

We were fortunate in recruiting two leading professionals in local government, who contributed local context, and a director from the Confederation of British Industry, who was able to articulate some of the issues for non-household customers.

This blend of expertise, combined with the formidable knowledge of the our regulator members, has provided real diversity of thought enabling us to frame powerful, wide-ranging challenges to the company. Diverse perspectives inevitably meant we didn't always agree with each other, but our final report represents our collective opinion.



## Independence

Ofwat can be assured that we have protected our independence very carefully. Every Water Forum meeting had a private session at the end to review progress. We have kept detailed minutes of all our meetings. We insisted on a company response to every single challenge and we were scrupulous in disciplined follow through on outstanding actions. We are confident that we have held the company to account. Nonetheless, independence is intrinsically difficult to evidence. To address this, we introduced our own peer review process to demonstrate our independence and evidence our impact. The results were very reassuring but also showed that, with hindsight, there are inevitably things to be improved. These findings (included in the appendices) will form the basis for a full review to inform PR24.

## Engagement with Severn Trent

The Water Forum has received full support from the Board and Executive. Non-Executive Directors have attended our meetings and the Chairman has hosted wide-ranging discussions during our planning days. We are appreciative

that Executives have attended meetings as needed; the CEO has been a frequent visitor and the Director of Strategy and Regulation has attended every one. In the opposite direction, I have attended Board meetings to update on progress and present conclusions, but also had informal conversations on a regular basis.

## Customer engagement

One of our most significant challenges has been on the design of the customer engagement programme. Rather than reviewing the plan in terms of customer wishes, we challenged the company to start with the customer and then design the business plan to respond to their needs.

To achieve this, we advocated a strategic framework for all research and insight development, so that they identified all of the questions that needed to be addressed at the start and then sequenced the programme to answer them in a process that was both effective and efficient. We proposed a 'hierarchy of needs<sup>1</sup>', to distinguish between different kinds of customer needs including constructs that recognised customer's attitudes to and affinity with water. For example, we maintained that

satisfaction and dissatisfaction do not have a linear relationship. The absence of dissatisfaction is not satisfaction but neutrality or apathy. The framework has been invaluable in ensuring that every piece of work had an explicit role in building knowledge and avoiding wasteful repetition.

This 'top-down' strategic challenge was matched by 'bottom-up' tactical challenge, ranging from the use of new tools and techniques to detailed challenge on say, sampling frameworks. Water Forum members attended research groups and deliberative workshops to see the quality of work for themselves. As we progressed through the programme, we challenged the company to provide independent assurance that inferences the company had drawn from each project were justified. Our assurers observed a high quality of implementation.

The Water Forum considers the cost has been proportionate; the spend of around £1.4m has doubled on PR14 but has provided a much more comprehensive lens into customer's priorities; we believe value for money has improved. We are confident that the company has a deep understanding of customer priorities. Most critically, we can see a clear connection between those priorities and the company's business plan

<sup>1</sup> Abraham Maslow, 1943, 1967, 1987.



proposals. We believe that the improvements in customer engagement are permanent. Our customer insight chapter includes a 'to do' list for the company of further actions that will enhance an ongoing and transparent dialogue with customers. The Water Forum will continue to challenge the company on delivery of this work.

## Does the plan reflect customer views?

The Water Forum has been ambitious for the plan and the benefits it will bring to customers. This involves multiple challenges: We have urged the company to make the necessary investment to improve service but to keep bills as low as possible through efficiency savings.

We have reflected the very high priority that customers put on environmental protection and the security of supply for future generations and challenged the company to respond effectively whilst still maintaining low bills for today's customers.

Careful analysis of research results has ensured that trade-offs are in line with customers' wishes. We are pleased to note that the plan provides an average annual bill decrease of 5% for customers using the new measure of inflation, representing a like-for-like reduction of 12.8% on the PR14 plan and this from a bill, which is currently the lowest combined bill in the industry.

One contributor to lower bills has been the flexible approach to risk which recognises the implicit uncertainty in environmental factors such as climate change. The company has committed to deliver the WINEP in full.

However, instead of adding the cost of initiatives which may not be needed, the company will only charge customers when they uncertain schemes are implemented. Given that this represents a significant change in approach, we challenged the company to test the proposal with customers through careful deliberative research as well quantitative validation. This was a good example of where there was some resistance to doing an in-depth study but we and the company are pleased that the company accepted the challenge and did robust research. As a result, we are now confident that customers are supportive of the proposed approach.

Severn Trent took its rewards and penalties within AMP6. From 2015–2016 to 2017–2018, the company earned £124m for its very strong performance. We congratulate the company on this achievement. Nonetheless, we scrutinised performance conditions and incentives proposal for AMP7 to ensure that the improvements promised to customers were important to them and represented good value for money.

The Water Forum challenged the company to use frameworks to categorise performance metrics. Our challenge was informed by appropriate triangulation. We are confident that the final suite of measures are in line with customer expectations.

Finally, the Water Forum challenged the company to consider how they could build trust with its customers. Water is a category that we know has low emotional involvement for most customers so it is a difficult issue to address. We believe that the Community Dividend is an imaginative response and subsequent research shows that it will be welcomed by customers. The proposed advisory Board to determine how the resources are allocated is particularly respected by customers.



## Additional observations

The work of the Water Forum and the customer engagement has generated some messages for the company, not all of which fit neatly into the Ofwat framework.

1. We are pleased to see the degree of ambition in the plan, particularly in areas where Severn Trent has had weak performance, such as interruptions to supply, but which are high priorities for customers.
2. The company is showing an innovative and agile approach to addressing key issues which we believe will be essential to deliver the plan. We have highlighted some examples in our report – look out for orange innovation boxes.
3. The environment really matters to customers. We note the company's determination to deliver on its environmental obligation. For example, we challenged it to improve biodiversity and we are pleased to see the introduction of a new ODI to deliver this.
4. Customers want more communication on their water company, its link to their community and how they can change their behaviour to lower bills and protect water supply. This finding emerged at the end of every workshop.

5. Customers emphasise the importance of engaging young people and planning focus on future generations; we are pleased to see some imaginative proposals in that area.

## Conclusion

The Water Forum has taken its assurance responsibilities to Ofwat very seriously; we estimate that typical members have invested 18 days over two years in face-to-face meetings – and much more in preparation. In addition, members of each sub group have written their own chapters to provide you with a first-hand account of our challenges to the company.

This is a team I have been very proud to lead. Members have been dedicated to the point of coming to meetings when they were on holiday, relentless in their commitment to the Severn Trent customer and extraordinarily hard working. Almost everyone did this on top of their 'day job', somehow. Of course, we couldn't have performed our task without the thousands of customers who participated in research projects and so I would like to thank them, too.

In the end, it really has been worth the effort. On all points, we have arrived at a position which both Water Forum and company recognise as providing a balanced outcome for the customer. Whilst that is satisfying, the most important verdict, the one we all really wanted to hear, came from the customer. We were pleased to note that the acceptability research shows 85% of customers find the plan acceptable.

We are pleased to assure that, from everything we have seen and read, Severn Trent has engaged effectively with its customers and its plan does reflect customer priorities.



# Governance

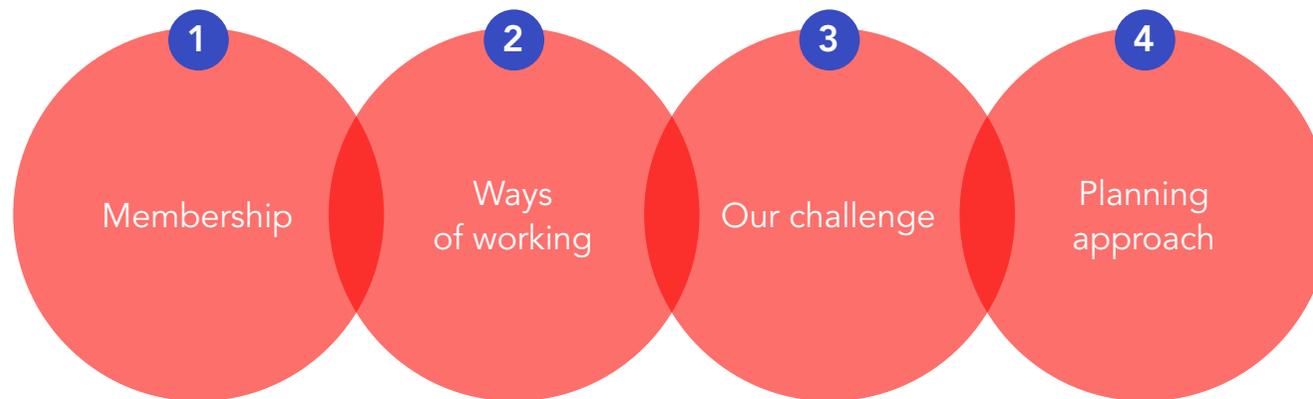
The Water Forum has been mindful that the weight Ofwat will attach to our findings is predicated on the quality of our governance. This chapter describes our governance arrangements and the subsequent peer review process we used to test how well they had worked in ensuring our independence from Severn Trent.

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# Design of the Water Forum

The complexity of the task facing a Customer Challenge Group is somewhat daunting. The Water Forum decided early that it would start with the end in mind and plan backwards from 3<sup>rd</sup> September 2018. In early 2016, we identified what we needed for PR19 so we could build on the success of the process in PR14. Our 'planning first' approach meant we asked the company to supply detailed, upfront scheduling – our very first challenge to the company.

Our design phase encompassed four main areas:



[Click to see each section.](#)



# 1 Membership

We anticipated the areas in which we would challenge the company and compared that with the skills we had on the Water Forum. We concluded that we had skills gaps, which needed to be filled in five main areas by independent members. We also wanted to increase diversity because we knew that a broader range of backgrounds would improve the quality of our discussions.

## We sought:

1. Market research expertise that would enable us to challenge the company on both approach and interpretation of results.
2. Asset appraisal expertise so that we could independently assess whether the company had reflected customer views appropriately in their proposals and particularly considered the options available to the company.
3. Retail expertise, specifically around vulnerability and affordability.
4. Deep understanding of the water sector and particularly the way outcomes in water were measured to challenge the company on incentive design.

5. Local government expertise and context through officers who were dealing with the issues linked to water daily.

This was already a demanding recruitment brief, but we knew mere skills were not enough. The issues the Water Forum would need to consider required members who had the intellectual capacity to grasp concepts quickly and absorb large quantities of relatively technical information<sup>2</sup>. However, even capability was insufficient. We were looking for the motivation and values that we knew would be required to go beyond the mechanics of water and think rather of the company's position in its local communities. Illustratively, two of the members appointed had to use holiday allocation to attend meetings, which was an indication of his commitment to Severn Trent customers.

The Chair developed role profiles and the recruitment process was handled by a consultant who was independent of the company. This was a very low-cost project in that advertising on social media was free. All roles (apart from the Local Government roles where we approached targeted individuals) had multiple candidates of an extremely high calibre.

Interviews were conducted by the Chair with another member of the existing Water Forum and we were able to make six strong appointments.

The Water Forum was required to have members from the regulators but frankly, we could not have managed without them. The regulators were the Environment Agency, Natural England, the Drinking Water Inspectorate, Consumer Council for Water. Their formidable experience and water expertise was invaluable. In addition, we have benefited from contributions from the Confederation of British Industry on the needs of business customers. Finally, two senior local authority professionals provided us with context on local communities and the work of local government.

The result of our design work was a high calibre, diverse team that resulted in a Water Forum that has been deeply independent. We have challenged each other. We have challenged the company. The result has been a highly stimulating team, an engaged set of debates, and very broad ranging challenge. Attendance levels have been in excess of 80% with gaps only for personal matters such as holidays and illness.

<sup>2</sup> We realised that the Water Forum had no fewer than four members with PhDs!



## Membership

Click on each member to see LinkedIn profile



### Gill Barr

Expertise: Chair

Current role: Non-Executive Director

Illustrative experience: Customer centric design of proposition and experience

#### Biography:

Gill is a Non-Executive Director on the Boards of PayPoint plc, Wincanton plc and N Brown Group plc. She is a branding expert particularly interested in earning corporate trust and enhancing reputation.

As an Executive, Gill worked at Management Committee level in blue chip corporates including John Lewis, the Coop, Kingfisher and MasterCard.



### Dr Nick Baker

Expertise: Market Research

Current role: Managing Director of agency

Illustrative experience: Expert in ensuring the customer voice is understood and helping organisations listen to what really matters to customers

#### Biography:

Nick has worked with a diverse set of public and private sector clients including HM Revenue & Customs, The Home Office, The Cooperative Group, Royal Mail and O2. He is particularly well known as a champion of behavioural economics thinking in research. Nick was elected by his peers to the Board of the Market Research Society in 2014 and currently chairs their think tank – The Delphi Group.



### Jan Britton

Expertise: Governance and local context

Current role: CEO of Sandwell Local Authority

Illustrative experience: Urban regeneration and sustainable development

#### Biography:

Jan is the chief executive at Sandwell Council and represents the West Midlands Combined Authority on the Water Forum. He joined Sandwell Council in 2006 as Head of Highway and Environmental Services, having previously worked at various county, district and metropolitan borough councils elsewhere in the country. Jan's professional background is in environmental and 'place shaping', including parks and conservation, planning, regeneration and waste management. Jan has been chief executive at Sandwell since 2010.



## Membership

Click on each member to see LinkedIn profile



### Ian Butterfield

Expertise: Biodiversity

Current role: Freshwater Advisor at Natural England Trustee of The Sherwood River Trust and The Trent Rivers Trust

Illustrative experience: Natural environment

#### Biography:

Ian has been a member of the Water Forum since its inception in 2012. He works closely with Severn Trent in relation to its obligations towards the nature environment including enhancing biodiversity and protecting Sites of Special Scientific Interest across the company's sites and landholdings.



### Rish Chandarana

Expertise: Commercial and technical expertise on infrastructure

Current role: Transaction Director, Arup

Illustrative experience: Chartered Accountant, due diligence specialist on major transactions

#### Biography:

Rish is a Chartered Accountant and a Transaction Director at Arup. He has over 14 years of Commercial, Regulatory, Operational and Technical due diligence expertise specialising in Energy, Utilities, Oil & Gas industries both in the UK and internationally. He has advised on over 70 successful transactions over the past five years. As a result he has gained an acute understanding of civil engineering, performance, organisational and business plan drivers, enabling him to affect holistic challenge with senior executives through to operations/engineering managers.



### Professor Bernard Crump

Expertise: Public Health, Water Sector

Current role: Chair of Consumer Council for Water (CCWater) Central and Eastern region, and Professor of Practice Warwick Business School

#### Biography:

Bernard is a doctor with a long NHS career as a Director of Public Health, Chief Executive of a Strategic Health Authority and was the first CEO of the NHS Institute for Innovation and improvement. He has been Regional Chair for CCWater for six years where his Board leads for customer research and engagement. He teaches postgraduate programmes in Leadership, Service Improvement and Innovation at Warwick Business School.



## Membership

Click on each member to see LinkedIn profile



### Richard Butler

Expertise: Non-Household priorities

Current role: CBI Director – West Midlands and Oxfordshire

Illustrative experience: Represents the region's business community on key policy issues

#### Biography:

Richard was appointed to his current role in 2011 previous to which he was Head of Inward Investment at Advantage West Midlands. Current active policy issues include the region's skill base, transport infrastructure, energy and access to finance.



### Bill Darbyshire

Expertise: Protecting and improving the water environment

Current role: Manager, Environment Agency

Illustrative experience: Environmental consultant, environmental regulator

#### Biography:

Bill is the Environment Agency's lead for protecting and improving the water environment. With 25 years of experience as an engineering contract, environmental consultant and environmental regulator, he is an expert in strategic environmental planning.



### Gemma Domican

Expertise: Consumer Policy and Protection

Current role: Policy Manager

Illustrative experience: Escalated complaints, team management and project management

#### Biography:

Gemma is a Policy Manager at the Consumer Council for Water and has worked there for 10 years. Gemma has worked in various roles at CCWater, including managing the Central complaints team dealing with escalated complaints against Severn Trent. Gemma was part of the Water Forum at the last price review and works closely with Severn Trent to represent the views of consumers present and future.



## Membership

Click on each member to see LinkedIn profile



### Paul Quinn

Expertise: Strategic Environmental Business Planning and Performance

Current role: Local Consumer Advocate Consumer Council for Water Central and Eastern Committee

Illustrative experience: Leadership roles with Warwickshire

#### Biography:

Paul Quinn sits on the Consumer Council for Water's Central and Eastern Committee. He worked for the Environment Agency and predecessors for 36 years holding leadership roles in Operations, Policy and Strategic Environmental Planning. He has considerable experience working on sustainability, waste and water management, risk and major incident management, business improvement and change management and initiating / managing partnerships within the public, private, voluntary and community sector.



### Karen McArthur

Expertise: Retail and service

Current role: Sustainability Consultant and Non-Executive Director (NED)

Illustrative experience: Consumer advocacy, professional standards and ethics

#### Biography:

Karen has previously headed up Corporate Responsibility / Sustainability functions for global companies including Vodafone and Thomson Reuters. She now has a portfolio of roles which centre on consumer / stakeholder advocacy and the promotion of professional standards. These include HS2, Chartered Banker Professional Standards Board, The Bar Standards Board, The National Trust and MOD. She is a Non-Executive Director for bodies certifying and setting standards to protect customer including MCSSCo and The Pension Quality Mark.



### Dr Steven Wade

Expertise: Environment, water resources and climate risk

Current role: Associate Director, Atkins

Illustrative experience: Advising on climate and environmental risks for water supply projects in Central Asia for the European Bank for Reconstruction and Development

#### Biography:

With over 20 years' consultancy experience, Stephen is a leading expertise on water resources management and climate change. He was formally Head of the Scientific Consultancy at the Met Office and Water Group Manager at HR Wallingford, a water research and consultancy company. His expertise enables strong technical challenge on water resources planning, flood risk management and the impact of extreme weather on operations and performance.



## Membership

Click on each member to see LinkedIn profile



### Dr Stuart Young

Expertise: Governance and local context

Current role: Executive Director,  
East Midlands Councils (EMC)

Illustrative experience: Local and regional  
planning and development

#### Biography:

Stuart has been Executive Director of EMC since it was established in 2010. With a background in spatial economics, he has extensive knowledge and experience in socio-economic development. He has worked for a number of local authorities, universities and other public sector organisations in the region. EMC is the politically led membership body that works on behalf of councils to support sector-led improvement and transformation. It works with Government on issues including HS2, Midlands Engine and strategic transport, planning and infrastructure.





## 2 Ways of working

The advantage of attracting senior leaders with highly relevant skills was offset to some extent by the disadvantage that most of them were in full time jobs. The regulator members are equally busy. We noted the research from PR14, shared by Ofwat, where Customer Challenge Group (CCG) members nationally reported a very onerous workload. We sought to design a way of working which would enable us to be rigorous, robust, highly challenging but also efficient.

### Water Forum

The Water Forum met four times per year and the agenda's for each meeting had been agreed at a high level from the start of the process. That high-level draft was refined and the company and the Chair finalised the agenda and papers for each meeting. These discussions directed the work of the Water Forum and opined on the quality (and sometimes quantity) of papers. Every agenda had a private session at the end of the meeting for the Water Forum to review progress, evaluate the company's performance and provide constructive feedback.

All meetings were minuted, reviewed action logs and checked for conflicts of interest.



### Sub groups

We agreed that not every member needed to challenge everything – in the first instance. We divided into workstreams, populated by members with the most relevant skills, led by an independent member.

1. Market research **Dr Nick Baker**
2. Retail **Karen McArthur**
3. Strategic investments **Rish Chandarana**
4. Performance incentives and outcomes **Dr Steve Wade**

Each workstream had opposite numbers – nominated managers within Severn Trent who were responsible for presenting proposals and accepting challenge.

The purpose of the sub group structure was to concentrate expertise and make the working more efficient. Whilst we were effective on the first, we note that even with this design, the work commitment undertaken by all members was very significant – particularly compared with what we had envisaged at planning stage.

	Meetings	Contact hours	Challenges
Engagement	10	42	93
Retail	10	45	37
Investment	12	48	106
Performance	14	55	57

The governance arrangements were mirrored those in the main Water Forum. For example, all meetings were minuted.

Each workstream reviewed the material in detail and challenged in depth. As a result, every workstream had a challenge log of its own. The workstream then summarised discussions and presented to their colleagues in the Water Forum. In this way, company proposals were challenged at least twice; once in depth in sub group meetings and once again by colleagues on the Water Forum.



## 3 Our challenge

We have challenged the company very broadly to cover all the issues in the Ofwat Aide Memoire. However, before we got into the specifics of topics, we were thoughtful about how to have most impact.

### **The design of our challenge has been informed by two main themes:**

Firstly, the broad-ranging expertise of Water Forum members enabled us to challenge a wide range of strategic issues and in more depth on specific details. The diversity of perspectives peppered our discussions with sometimes surprising and innovative ideas.

Secondly, we believed that the process of how we challenged would be critical to our success. Specifically, we planned our work to synchronise with the company's design plan so that our challenge would be delivered at precisely the moment where it influenced decisions.

This required rigorous planning; dates for Water Forum meetings were set up at least a year in advance with outline agendas for the topics that would be covered at each one. The process delivered. As a result, the Water Forum teams and the company teams worked closely together throughout the process. The depth of understanding that progressively built up proved to be increasingly valuable as we moved through planning.

Our planning process identified two points where an opportunity to work in depth on key issues would be powerful to the overall PR19 process, but required more time than normal meetings. Two off-site meetings, with attendees from the company and the Water Forum, were held in 2016 and 2017 over two days. The meetings ensured that the plans were presented so the Water Forum could challenge and the company could respond in an efficient way.

We were unsurprised to hear that the company found our feedback detailed, rigorous and unrelenting. However, we were delighted that the company has typically been responsive and we can see that there are many instances of fundamental change to the approach or the plan because of our challenge. Water Forum members have felt valued for the contributions they have made.

Of course, even with planning and even with collaborative challenge, things didn't always work perfectly. There were times when a planned agenda wasn't ready in time or the Water Forum requested revision. There was a need for flexibility on both sides, but our assessment is that, even with the odd mishap, starting with a plan enabled more efficient working.



## 4 The planning approach

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Of course even with planning and even with collaborative challenge, things didn't always work perfectly. There were times when a planned agenda wasn't ready in time or the Water Forum requested revision. There was a need for flexibility on both sides but our assessment is that even with the odd mishap, starting with a plan enabled more efficient working.



# Scope of work

The Water Forum has followed the Ofwat guidance very closely. We have tested the quality of the customer engagement undertaken by Severn Trent. We have then carefully considered how the Severn Trent business plan reflects the findings of that research.

Our challenge on the company's approach to customer engagement has been broad. We have challenged at a strategic level on approach and at a tactical level on techniques, interpretation and findings. This work is reviewed in a separate chapter. In the meantime, it is worth pointing out that members of the Water Forum attended many of the deliberative research workshops and were fully involved in execution of the plan. The expertise of our working group has provided benchmarks relative to other consumer sectors, which have provided useful context to evaluate the company's programme.

We drew attention to the Ofwat emphasis on innovation. We believed that there were many instances of disruptive thinking in other sectors

that could usefully be considered in the water sector. We have been encouraged by the results and have highlighted initiatives that we consider to demonstrate this perspective in our report. Look out for orange boxes in all chapters.

Linking the research findings to the company's plan is described over seven chapters in the report. However, the common features have been a detailed review of each plan initiative with specific research or other triangulated sources that support it (or otherwise). Given the very significant volume of research and the array of triangulation data, this has been an enormous task, but absolutely essential to the assurance which we are now able to provide to Ofwat.



# Funding

Funding has been important to the Water Forum to ensure our independence. We made a number of requests for funding, each of which was granted by the company.

**These include:**

- An independent recruitment consultant.
- A fee for the independent members who attend meetings in addition to their jobs and their expenses. (Those attending on behalf of other regulators incorporated the Water Forum into the remit of their executive roles.)
- Funding for off-site meetings and two overnight stays to allow in-depth working.
- Support for the development of this report.

The funding of the Water Forum has been enough to enable us to work effectively. Expenditure has been made where necessary but kept to an absolute minimum; we are all conscious that every penny spent on our work is the money of Severn Trent customers. For example, where possible, our off-site meetings were held on company premises.



# Working with Severn Trent

The Severn Trent Board has been fully engaged with the Water Forum.

The Water Forum chair has presented to the Board at least once a year formally but engaged informally more frequently. The chairman of Severn Trent attended both the Water Forum off-site meetings to discuss key issues with the Water Forum and collect informal feedback. Non-executive directors have attended the Water Forum as guests and the audit chair has presented assurance to the Water Forum on Annual Performance Review audited performance. The final conclusions from our work were presented to the Board in July 2018 by the Water Forum chair.

The executive has also attended the Water Forum. The strategy and regulation director has attended every meeting, the chief executive and other executives have also attended frequently, which has added greatly to our debate. The company has engaged fully with our discussions.

The involvement of the Severn Trent Board has been committed, appropriate and highly supportive of challenge. They have been largely non defensive and quick to recognise where the Water Forum has improved the business plan.



# Governance

The Water Forum has explicit terms of reference which have been available on our website for full transparency. We have posted videos to introduce members to the public and we have our own Twitter feed to update customers on our progress.





# Assurance

We believe that our governance was of a very high standard. However, we were also conscious that, whilst our Collaborative Challenge approach had enabled us to maximise our impact on behalf of customers, it could be interpreted as a risk. Had we maintained our independence from the company and had we really made a difference? We felt it important to evidence our independence and evidence the impact of our interventions. We want to enable Ofwat to place a very high value on our assurance.

Consequently, we instigated our own peer review assurance process. After the vast majority of the PR19 material had been presented to the Water Forum and its sub groups, two Water Forum members ran a peer review process over the course of a day. The members were senior professionals in the Local Authority sector with expertise in high-quality governance. While both had made valuable contributions to the Water Forum, neither had been a member of a sub group and so were independent of them.



# Assurance letter

Drafts of the chapters for this report were used to identify issues to explore. Each sub group leader was then interviewed for 45 minutes on the issues and asked to provide examples of what had worked well, what had worked less well, where the sub group had been unable to agree with the company, as well as their general reflections on the process. None of the discussion was in the presence of the company.

The conclusions of their process are summarised in the [appendices](#). At the end of each chapter, there is a short summary of the assurance for each area. However, their overall conclusion is summarised in a letter as shown to the right.

waterforum

## To whom it may concern,

At the request of the Chair of the Water Forum, we conducted an independent assurance exercise on the methodology used for PR19. This exercise sought to provide assurance that the Water Forum and members of its sub groups had retained the necessary level of independence, and provide a view of how effective the challenge and governance of the Water Forum has been throughout the development of Severn Trent's 2020–25 Business Plan.

This letter provides an assurance statement of the level of independence maintained by the Water Forum.

As independent members of the Water Forum who had not been involved in the work of the sub groups, we were able to provide a level of independent challenge to the sub group leads during an Assurance Day held at Severn Trent's head office. Severn Trent was not involved in this assurance day.

Through interviewing all sub group leads and the chair of the Water Forum, the Peer Review team is assured that the required level of independence has been maintained throughout the challenge process. All members of the Forum have taken their roles extremely seriously, and demonstrated a high level of commitment to ensuring that customer insight has driven the way Severn Trent has developed its business plan.

The value of the Water Forum's "collaborative challenge" approach is demonstrated by the significant improvements in the way the company has used appropriate customer insight and articulated how this has influenced their business decisions. It is also demonstrated by the way the company responded to the challenges made, and ensured senior representation on sub groups were receptive to challenges and influenced business practices back in the company.

A full report detailing the assurance methodology and findings is attached to this letter.

Yours sincerely,

**Jan Britton**  
Chief Executive

Sandwell Metropolitan Borough  
Council on behalf of the West  
Midlands Combined Authority

**Stuart Young**  
Executive Director

East Midlands Councils



# The Water Forum's concluding views

Our challenge to the company has been to take the learning and implications from PR14 and build on this to provide a rigorous and robust approach for PR19.

Firstly, we have added new skills to the expertise of our regulator members that was so important to the quality of our PR14 report. We have recruited skills that directly responded to the areas that were most important for our assurance to Ofwat. These new members have added best-practice experience from other sectors, which has broadened the scope of our challenge. Those skills, combined with the dedication and formidable sector understanding of our regulator members, has been a powerful combination.

The Water Forum has been a highly committed team that has learned from each other and challenged more effectively as a result.

Second, we have amended our way of working to ensure deep dives into key subject areas, multiple challenge through workstreams and close collaboration with the company so that our challenge was delivered at a point in the planning process where there was time for the company to respond to our feedback and customers' wishes.

Finally, we have challenged ourselves to evidence our independence and to demonstrate the impact we have had on the PR19 process. We have identified many things that can be improved in the future, but overall we are very proud of the rigour and quality of our work. Severn Trent customers can be assured that their interests have been paramount in our approach and have shaped both this report and the company's plan.



The Water Forum has followed high-quality governance protocols.



# Engagement

The customer engagement chapter is a relatively detailed chapter of the challenges we made on the customer engagement approach from both a strategic and tactical perspective.

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# Introduction – the Customer Engagement Group (CEG)

waterforum

The Water Forum recognised that its challenge to Severn Trent would be predicated on what really mattered to customers.



**Dr Nick Baker**

Sub Group Lead

[Click to view profile](#)

We therefore needed a deep understanding of customer views so we could reflect them accurately in the discussions we had with the company.

Understanding customer views is particularly challenging in the water sector. Water provision is a service with low consumer engagement, partly because consumers take provision for granted and partly because they have no choice of supplier. So the task of getting their attention, helping them to understand and opine on some of the choices that the company would have to make, is a complex undertaking.

This combination of an absolutely critical input into the Water Forum's deliberations and the difficulty in seeking customers' views is intrinsically challenging. As a result, this area of work was accorded extremely high priority in terms of agenda time to explore the key issues.

This chapter describes how we defined our scope and where we focused Water Forum effort. We have explained how we exercised our remit. But the vast majority of the chapter is spent describing our challenges and the company response to those challenges. You will see that our challenge fell into two main categories:

- Strategic quality on the insight architecture.
- Tactical quality on the implementation of the strategy.

Severn Trent has made excellent progress to becoming a customer centric organisation. Nonetheless, much remains to be done. We have challenged them to consider a continuous improvement programme to deepen understanding and to do so at lower cost by leverage of new tools, particularly around data management. We conclude this chapter with a to-do list of challenges that we would expect them to address in the next few years.



# Scope and focus of Water Forum challenge

This chapter is focused on providing assurance on the quality of the Customer Engagement Plan.

By 'customer' we have considered both retail customers and non-household customers. The quality of the research was critical to the quality of challenge that the Water Forum was able to make on every other issue. We had some very substantial challenges and suggestions to improve the company's approach to its customer engagement.

The purpose of conducting research is to ensure that decisions in the design of the business plan are made with reference to customer preferences and needs. The evidence on how we have used research findings to challenge on the business plan design can be found in subsequent chapters on [Retail](#), [Investments](#) and [Performance](#).

For those chapters, we have one simple graphic:

- Which market research techniques have been used to understand customer needs.
- Which research projects provided the evidence for each key topic and informed Water Forum challenge.

Having sought customer views, challenged the company's business plan to reflect those views, we needed to check that the resulting plan was acceptable to customers. This topic is discussed in our [Conclusion](#) chapter.



# How the CEG exercised its remit

The CEG challenge started at the very beginning when they challenged the company to provide an end-to-end plan to justify the research programme as a whole and ensure that learning was cumulative.

The sub group spent a great deal of time in detailed familiarisation outside main meetings. Water Forum members attended key customer research workshops and events as observers.

The CEG was led by a thought leader in market research with deep understanding of both strategy and tools and techniques. The sub group and the Water Forum as a whole benefited immeasurably from his direction and counsel.

However, it is important to note that we were also fortunate to have a very strong membership with expertise that was invaluable to the quality of the challenge and the evolution of the strategy. For example, our Environment Agency colleagues were extraordinarily helpful and knowledgeable as they adapted some of the thinking to reflect key environmental issues.

Governance arrangements mirrored that of the Water Forum. Meetings were minuted and detailed challenge logs maintained. This ensured that challenges were addressed in a structured and effective way. Given the importance of this piece of work, the Water Forum also challenged the company to get it assured by an independent third party, which the company agreed to.



# How the company listened

In other chapters, when we talk about listening, we mean listening to the customer. Here, we mean listening to a range of stakeholders as to what we need to cover in the customer engagement programme.

This includes things like what the customer had told us in the past to ensure we don't spend money on research unnecessarily.

The CEG believed that the way to be efficient and effective was to start with the end in mind. What we meant by that was to challenge the company to not conduct any research until there was a plan that described every project, so that it could demonstrate to the CEG that the programme covered all the areas needed. The company responded very positively to this challenge.

The planning stage was therefore very important. The CEG was mindful that, with a broad range of possibilities to improve customer engagement, the company needed to be selective to be efficient. The Water Forum worked with the company to reflect on the past so as to continue what was working well but improve on things that were working less well.



# The Water Forum's challenge of Severn Trent's approach

In considering our approach to challenge Severn Trent, the Water Forum reflected carefully on learning from PR14 and the implications on PR19.

## Reflecting on PR14

It is important context to remember that PR14 was a turning point for the sector in terms of the importance of the customer. The Water Forum reflected on the strengths from PR14 and the opportunity to make improvements for PR19.

### **There were considerable strengths:**

- The rationale for the research and insight was to support the business plan design so that it was explicitly shaped to respond to customer views.
- Prominence was given to market research techniques that could elicit customer views and, in the case of willingness to pay for example, actually put a value on specific initiatives or attributes.
- The outputs from these projects were scrutinised by Customer Challenge Groups (CCGs) for the first time adding to the priority given to the customer's views.

### **However, there were also some shortcomings which we noted:**

- Customer engagement activity was focused on supporting the business plan rather than the business plan being designed around the customer perspective.
- The customer insight was derived from research projects, but combining the results from a myriad of surveys did not necessarily make it easy to draw strategic conclusions as to what the customer was telling the business.
- The research techniques were relatively innovative in the sector and so experience in those techniques was apparently limited to a few suppliers. As a result, the supplier base was highly concentrated. For those members of the Water Forum with experience in customer research, this degree of concentration was a real surprise. We wondered if there was an opportunity to use a range of suppliers to encourage diverse approaches and particularly to replace a degree of conformity with real innovation.



- The wealth of data from non-research, day-to-day customer contacts was not used. We suspect this was partly because even five years ago, the tools for doing so efficiently were not as readily available.
- At Severn Trent, beyond the customer satisfaction tracker, there was no long-term strategy to seek customers' views on different topics. Again, this is an area where tools have improved significantly since PR14.
- Finally, the Water Forum felt that the investment in customer insight was relatively low given the size and complexity of the issues to explore. However, we also recognised that investment in research is effectively spending customer's money so there was a critical need to be proportionate. The trouble is that it can be difficult to know what 'proportionate' is and we determined to carefully challenge the company on research investment for PR19.

## A strengthened approach for PR19

Given this foundation, the Water Forum sought to build on the achievements of PR14 and to identify opportunities for improvement in PR19.

- Our first challenge was to inverse the approach to PR14 of reviewing the plan in terms of customers' needs. Instead, we have challenged the company to start with the customers and then design the business plan that accurately responds to their needs.
- To really focus on the customer, we challenged the company to develop a strategic framework for all research and insight development. We believe that this challenge was one of the most important we made during the whole price review process and we encouraged the company to do nothing until it was complete.

**We were concerned that, without a high-quality strategic framework, there were some real risks:**

1. We could fail to identify questions that were essential to address until it was too late.
2. We could find that projects overlapped and repeated questions leading to inefficiency and unnecessary expenditure.
3. It would be difficult to right size the research programme investment or to evaluate whether it responded to the issues in the strategic framework in an appropriate and proportionate way.
4. Pragmatically, without a comprehensive framework, it would be difficult to sequence and project manage the programme to deliver within our time-scales.

**Consequently, we challenged the company to provide the following:**

1. The objectives for the programme overall, and particularly its link to the corporate strategy to 'be the most trusted water company and provide a lasting water legacy'.
2. Clear objectives for each piece of work.



3. A rigorous assessment of existing knowledge so that new work did not simply replicate findings the company already had.
  4. The sequencing of the programme of projects so that each project contributed to the overall knowledge base, without overlap or replication that could waste customers' money.
  5. The triangulation of outputs to ensure that we could conclude on customers' views in as a robust a way as possible, rather than relying on one research project or one piece of data.
- We noted that the strategic framework became a critical mechanism in tracking customer focus and to right sizing the investment the company should make in customer insight as noted above.
  - We advocated a move to efficiently harness the wealth of everyday data the company has to ensure that the customers' views are expressed by what they do as well as what they say. We challenged the company to use the resultant insights for the operation of the business and day-to-day prioritisation, not just for the five-year business plan.
  - We suggested additional new, innovative techniques to the company and advised them accelerate their adoption. It is pleasing to note that a number of these are now in place, including a long-term engagement tool to rapidly access customers' views.
  - We challenged the company to import new thinking from new suppliers and collaborated with the company to identify candidate organisations.
  - Finally, in light of the points above, we challenged the company to spend more on its customer insight programme. In discussions, we were able to challenge the company on the range of techniques and the breadth of projects that we felt were needed to answer the questions posed by the strategic framework. We recognise that there has been an increase in spend for PR19 compared to PR14<sup>3</sup>, but the strategic framework gave us real confidence that the spend was proportionate and appropriate to the issues that needed to be resolved.
- We are very pleased to report that the company welcomed these challenges and all of them were adopted.

## Developing the programme

The Water Forum worked closely with the company from mid-2016, so our challenges were made at a point where it was not too late for the company to make changes to the plan. We were encouraged by the open, non-defensive stance adopted by all the colleagues we met.

The leadership of the business, and particularly the CEO, were consistent and energetic in their determination to become ever more customer centric. This was motivating to Water Forum colleagues because we could see a direct link between our work and the impact on the lives of the Severn Trent customers.

### Our challenge ran in two main directions:

**Top-down** strategic challenge – such as the requirement for a strategic framework

**Bottom-up** tactical challenge – such as issues around sampling

We assessed the value we were adding to Severn Trent customers, not in the number of challenges we raised, but in their quality (although as the challenge log shows, there was a very high number of challenges!).

<sup>3</sup> Spend in PR14 was £0.7m and spend in PR19 doubled to around £1.5m.



## Strategic challenges – the strategic framework

Customer insight sits at the heart of the company's business plan and a fundamental cornerstone of its promise to customers, as well as its regulatory requirement to demonstrate a "clear commitment – across the entire business – to genuinely understand and respond to the different needs and requirements of their customers". This requirement in turn necessitates a coherent plan to deliver insight that has the customer voice (expressed or latent needs at its core) and is guided by a clear and fixed set of central pillars.

The need for an intellectual framework to underpin the work comes from its central importance to the business plan itself, as well as from the breath of the research requirement, complexity of the issues being dealt with and the undeniable fact that customers do not spend huge amounts of time in their daily lives grappling with the issues the research programme needs to cover.

As a precursor to determining the strategic framework for the research programme, the Water Forum challenged the company to develop a set of core guiding principles.

**The company adopted this suggestion, which provided valuable input to the overall approach:**

- Understand and then focus on what matters most to customers.
- Ensure customer evidence takes account of things customers are aware of and things that are important for their future, but that they are not aware of.
- Build on existing knowledge to avoid spending customers' money on things they already know.
- Ensure that the sequencing of work components should build knowledge cumulatively in a coherently structured work programme.
- Develop an evidence base which connects customer priorities to the company's strategic objectives and its delivery to customers.



## Challenge 1: Design a strategic framework to guide choices

We challenged the company to consider existing academic and best-practice sources to design a framework which was predicated on robust thought leadership and tested in a rigorous way – albeit in different sectors and circumstances. Our own academic review<sup>4</sup> described trust as an output that arises when the things that matter most to customers are delivered successfully. Trust arises from different elements. Some are emotional such as service complaints and others are transactional such as water quality. Understanding different types of trust and how they could be managed together has been shown to be essential to earning it.

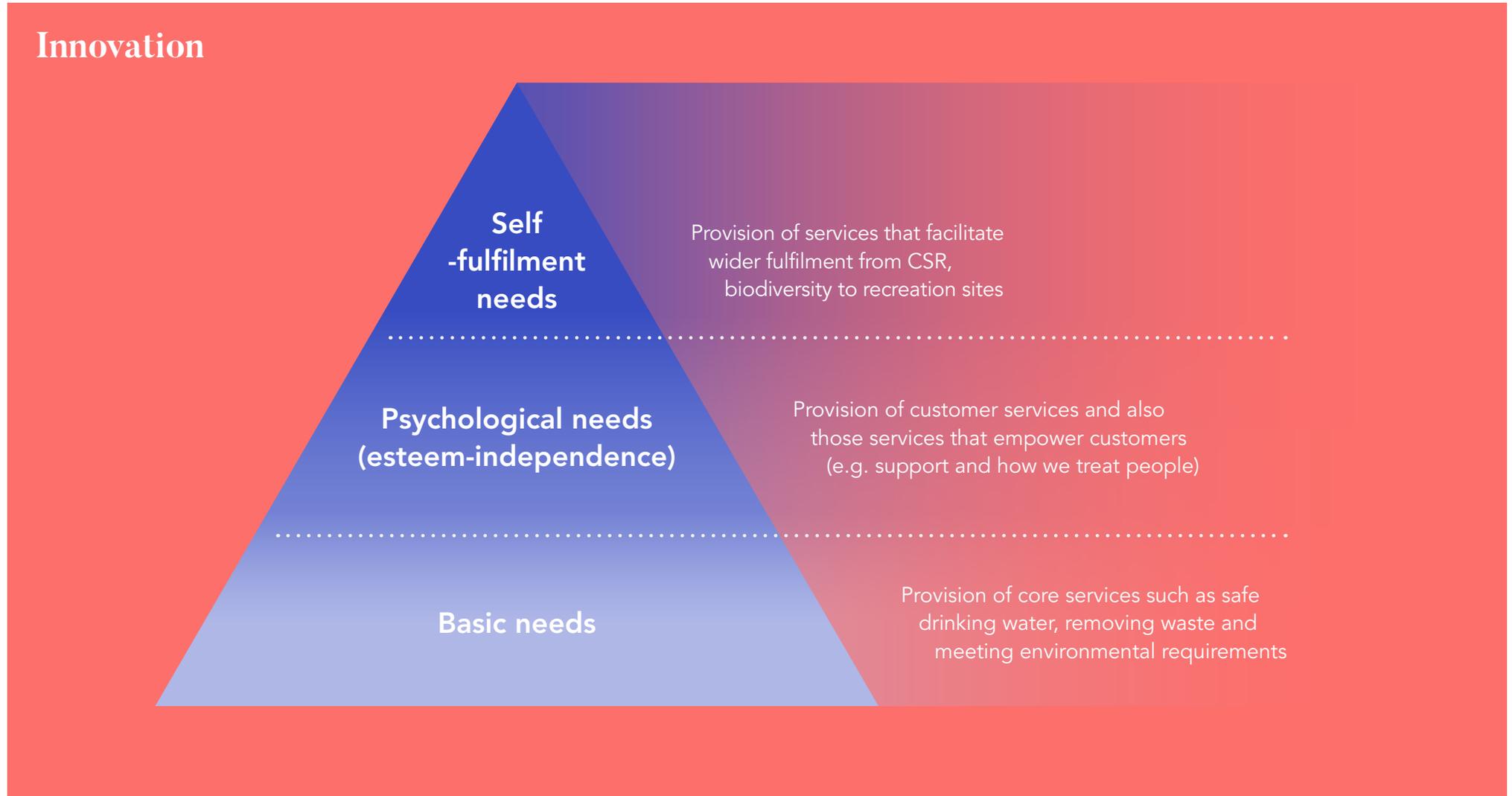
An initial re-appraisal of the PR14 research outputs, operational data and customer complaints data helped the company to develop this thinking. The Water Forum challenged the company to consider a new construct; **a hierarchy of customer needs** in relation to customer priorities.

For example, it cannot ask customers to prioritise clean drinking water or good customer service. It is clear that clean water has a different place in the hierarchy of needs, but both are very important. The subsequent work explored which attributes belonged in each layer of the hierarchy of needs and was used to understand customer trade-offs within each layer of the hierarchy. The hierarchy of needs is illustrated on the following page.

**Company response:** The company accepted this challenge and, in fact, improved it by exploring its potential in more detail. The hierarchy has deepened understanding of **what matters to customers** and how delivering on these needs will build both emotional and transactional trust. The model facilitates decision-making processes, which have become more specifically focused on a type of customer need. As a result, the company is able to respond explicitly to that need in a way that is proportionate and effective. It provides a systematic approach to ensure that all factors that can earn customer trust are identified and considered, then subsequently triangulated to inform the business plan.

<sup>4</sup>The Psychology (and Economics) of Trust, Evans and Krueger 2009, Rebuilding Trust, Harvard Business Review, June 2009.

# Hierarchy of needs





## Challenge 2: Understand what drives customer satisfaction at each layer

The hierarchy of needs was widely seen as useful but insufficient to capture some of the nuances of customer needs. The second core thought that we challenged the company to reflect in the framework was what drives positive and negative customer experience.

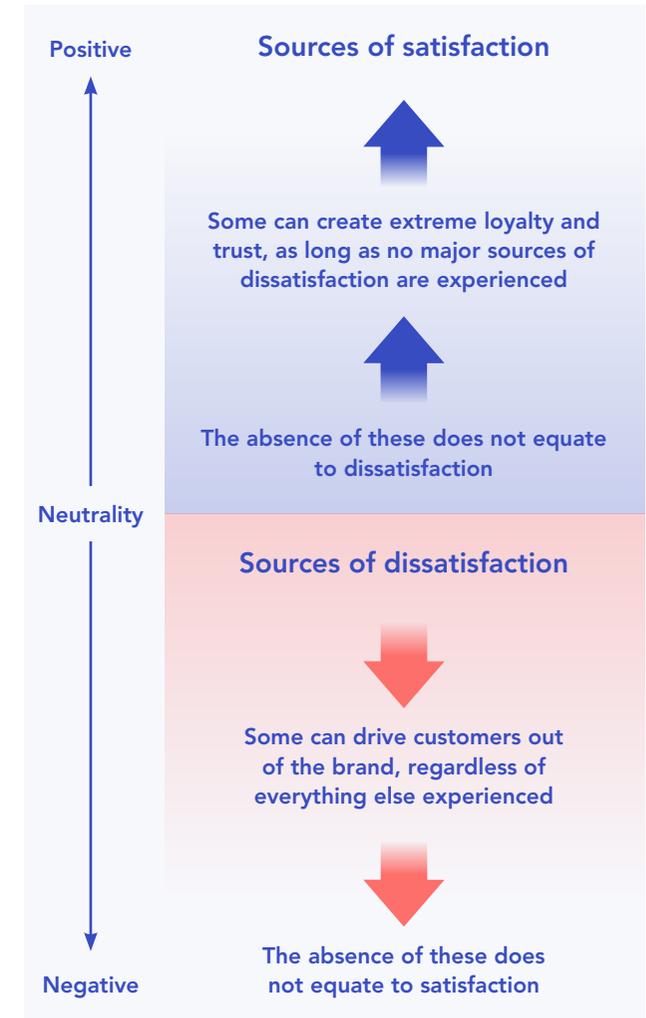
Up until this point, there had been an underlying assumption that satisfaction was on one, linear continuum. However, we challenged the company to think about this in a more sophisticated way. There is a vast body of research which demonstrates that there are two dynamics of what matters to customers that play different roles in driving trust; satisfaction and dissatisfaction. These act independently and in parallel (not on a continuum).

As illustrated in the diagram to the right, the key outcome of this thinking is that:

- the absence of satisfaction / trust is not dissatisfaction / distrust but neutrality;
- the absence of dissatisfaction / distrust is not satisfaction / trust, but again neutrality; and
- neutrality is perhaps better described as apathy or indifference.

We challenged the company to recognise that the hierarchy of needs must be considered one level at a time. Until customers are satisfied with the base layer requirements, the next level is not relevant. For example, customers do not compare 'safe drinking water' with accurate billing. Customers need to be satisfied on the first before the second is even a consideration. Understanding satisfaction, at each level, is critical to earning their trust.

**Company response:** The company has adopted the thinking on satisfaction and considered each layer of the hierarchy independently.





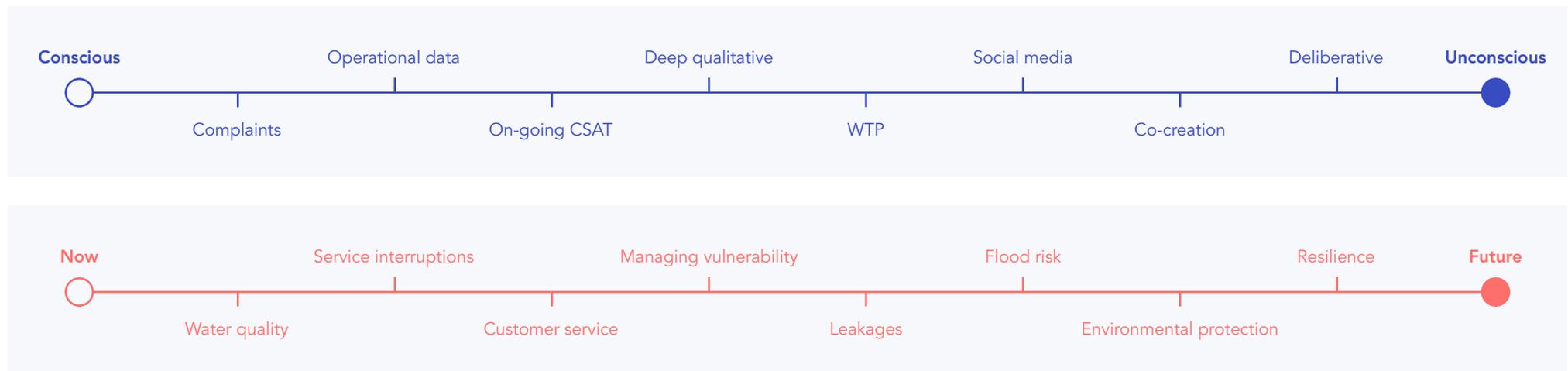
### Challenge 3: Recognise the spectrum of consciousness will dictate choice of research tools

The Water Forum challenged the company to face into the fact that most customers, most of the time, don't think about water. Our third core thought was to be more explicit about how it makes choices around research methods and how each choice needs to take into account the issues which need to be addressed. The final component of the strategic framework was specifically developed in response to this challenge.

The research programme needs to distinguish between issues that affect customer's experience 'now' and those that will affect their future. Inevitably, customers are more conscious of 'now' but they may still be unconscious of behaviour (i.e. customers make every day decisions and are not conscious of all of the various factors affecting decisions). The further one goes into the future, the more customers are unconscious of key issues which may affect them or future generations. The research programme needs to break these down and understand how consciousness changes customer priorities and influences decision-making.

The diagram below provides an illustration of how mapping the core research issues to a spectrum of consciousness, can be used to guide decision making on research approach and methods, which was deployed in the overall final definition of the research programme.

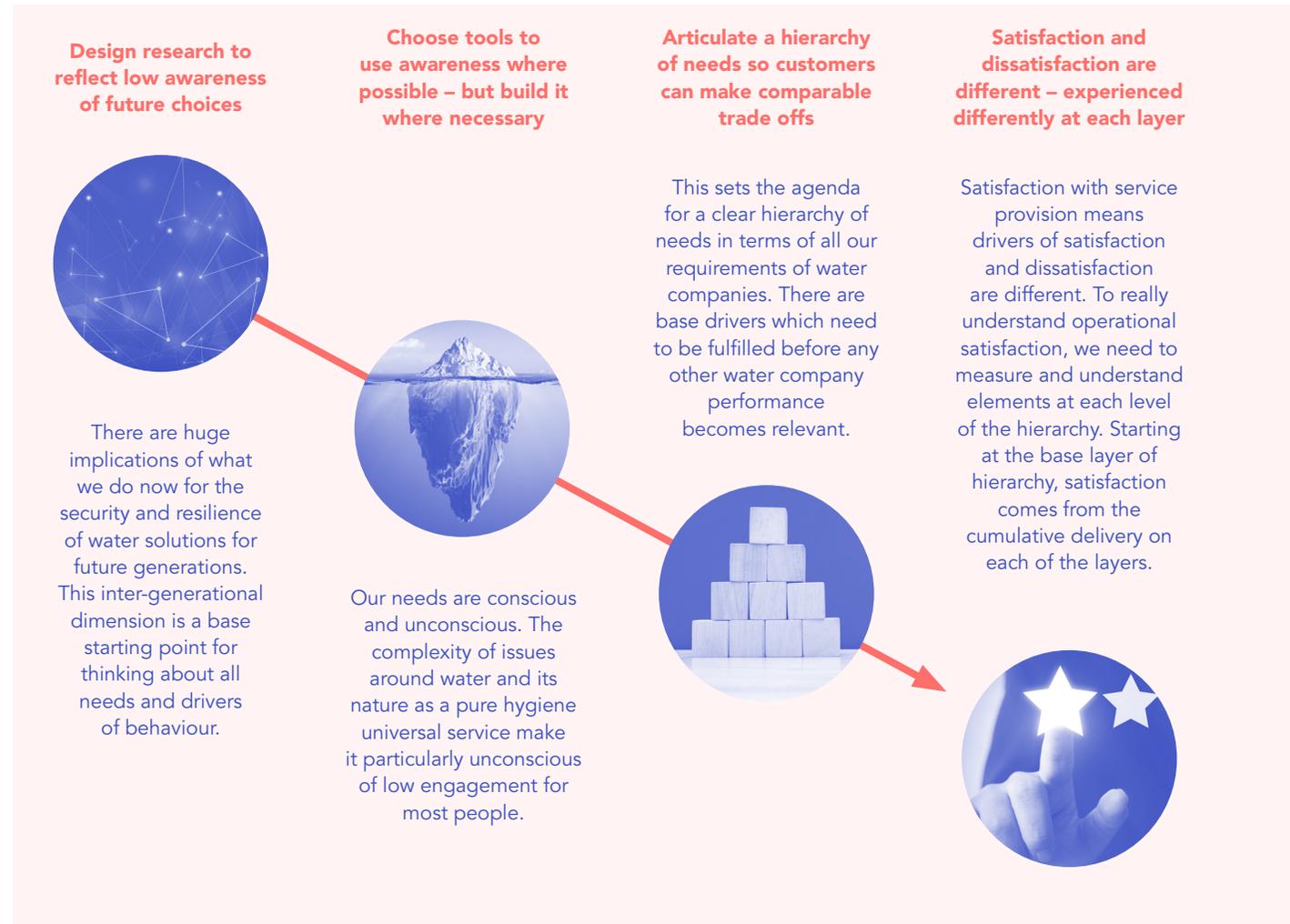
**Company response:** The company has used this part of the framework to improve the implementation of its research programme (see Tactical Quality).



## Summary of the strategic framework

The Water Forum challenged the company to build an insight architecture and strategic framework. We believe this is a key prerequisite for designing a robust, clear and comprehensive insight programme, which develops knowledge cumulatively and efficiently. This represents a major improvement on the PR14 approach and ensures the company has a research programme which represents customer views in a comprehensive way that will provide Severn Trent with the detailed insight it needs to earn customer trust.

The company has been disciplined and diligent in applying the framework – even when it wasn't convenient to do so.





## Tactical challenge – putting the framework into practice

Once the company had established the validity and utility of the framework, it was able to guide a series of important decisions required to build the final research programme. In summary, there were four crucial areas of challenge to the company:

- **Who to talk to?**
  - ensuring representivity and robust sample design.
- **How to talk to customers?**
  - getting the right research method for the audience and the issue.
- **How to listen as well as ask questions?**
  - using revealed ‘data’ not just primary ‘question and answer’ research (e.g. operational and complaints data, social media data and observation).
- **What to talk to customers about?**
  - getting the research materials fit for purpose and ensuring they are understood by research respondents.





## Challenge 1: Who to talk to?

Sampling and research methodology are the crucial fundamentals of getting to a robust set of evidence on customer priorities. We challenged the company to ensure the evidence base is representative of the audiences required for different components of the programme, as well as overall, and to direct the most appropriate research method to each area of customer research. Fitness for purpose is paramount in getting this right.

In order to address the full range of customer priorities, it's important to design a blend of representative research (e.g. full Severn Trent customer base) with specific robust sub-samples of special interest groups (e.g. different types of vulnerable customers or those affected by issues like sewer flooding) to understand their specific needs in depth or biases in core research instruments.

There are many examples of challenge of the sampling but illustratively, the Water Forum challenged the company to include a representative sample in the 'Willingness to Pay' survey to enable it to gross up the valuations to that of the whole region.

The sub group challenged that the initial proposed approach is only quasi-representative and that a stratified sample was required. The company responded to this challenge by noting that, in order to be cost efficient, a completely random sampling approach was not feasible. However, the approach deployed was random within randomly selected output areas (which reflected the general rural/urban split). It was felt that the approach was both pragmatic and represented the best value for money. The approach can be referenced further in [Appendix A1: Engaging Customers](#).

## Innovation

### ...considering the initial non-responders

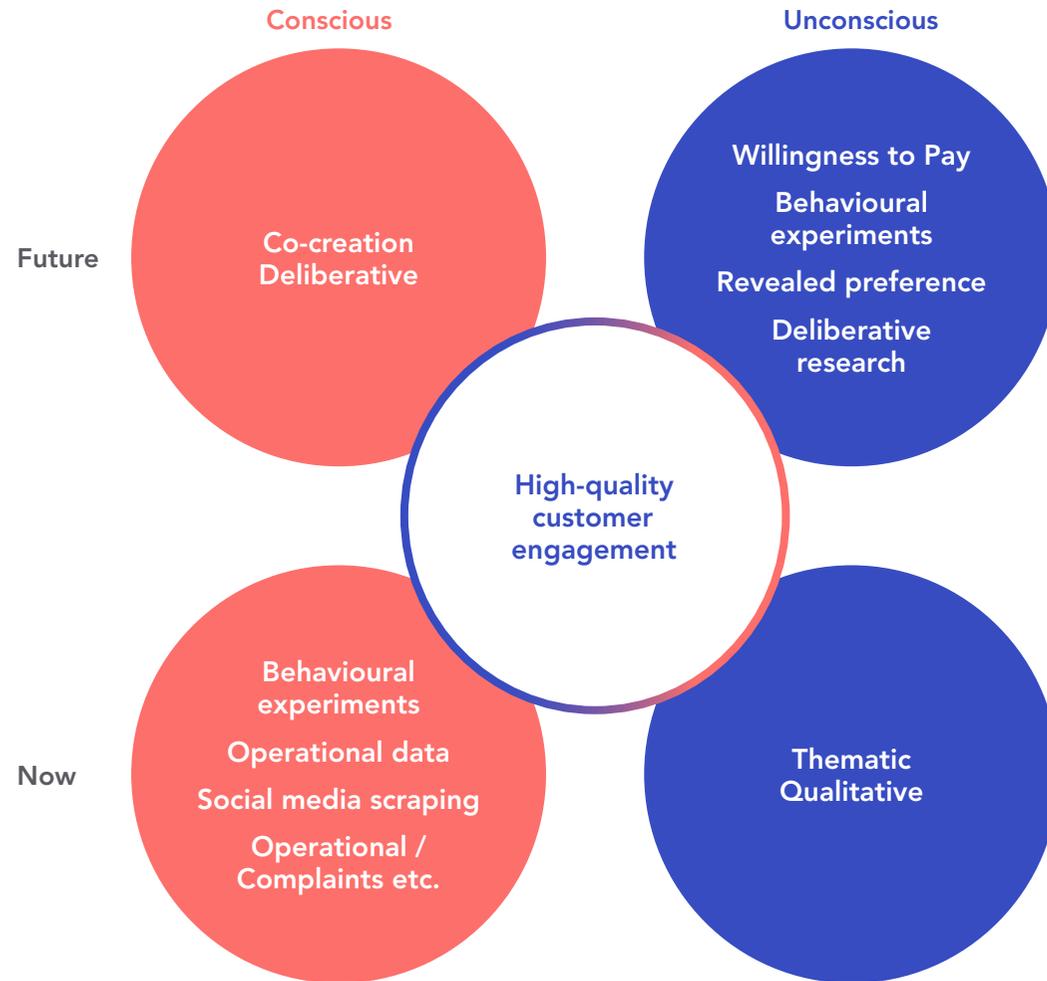
The Water Forum challenged the company to consider customers that were previously considered if they were not able or willing to take part in face-to-face research at first ask. These customers were referred to as "non-responders" and it was noted that this group consisted in two types: those who were not at home when the fieldwork took place, and those who were at home but declined to take part. The company responded to the challenge by asking the research agency to collect the addresses of non-responders in the main Willingness to Pay fieldwork and then contacted them again with a paper version of the survey. The Water Forum believes that the "non-responders" survey was an innovative and sector-leading approach to understanding the views of this customer group, and gave the company crucial insight on this previously ignored group of customers.

## Challenge 2: How to talk to customers?

There are a number of important areas to consider when defining the appropriate research method for a given topic, as customers cannot always answer direct questions or do not have the knowledge to contribute without being taken on a journey of understanding through the research.

The Water Forum challenged the company to do a detailed review of the specific issues it needed customer feedback on in order to determine the research programme, before using the **Engagement Optimiser** as the primary determiner of how to apply methods to research topics.

### Engagement Optimiser





**Company response:**

The company designed its programme using strategic framework tenets. This is evidenced on the table below which shows how each project was categorised.

Hierarchy	Research project	Objective	Engagement Optimiser	Method
Basic needs	PR14 valuations research	Understand the value customers place on service improvements	Unconscious, future	Online and CAPI (CATI for NHH)
	PR19 willingness to pay – core survey and non responders		Unconscious, future	CAPI (CATI for NHH). Self complete postal survey for non responders
	PR19 willingness to pay – contextualised		Unconscious, future	CAPI
	PR19 willingness to pay – highly informed	Understand the value customers place on service improvements – after deliberative research	Conscious, future	Sel-complete paper survey
	Customer contact and complaint data	Understand what drives the majority of customer contacts and complaints	Conscious, now	Analysis of customer complaint and contact data
	Supply demand deliberative research	Explore customer views on the supply demand deficit	Unconscious, future	Deliberative workshop and depths
	Sewer flooding deliberative research	Understand customer views on sewer flooding and surface water management	Unconscious, future	Deliberative workshop, depths and co-creation
	Resilience deliberative research	Understand views on water company resilience and supply resilience in particular	Unconscious, future	Deliberative workshop and depths
	Interruptions to supply avertive behaviour	Understand perceptions of a interruption to supply and costs incurred	Conscious, now	Survey on experience of interruptions and avertive behaviour
	Choices research	Understand views on proposed performance targets, approach, incentives and investment options	Unconscious, future	Deliberative groups and survey
	Acceptability research	Understand whether customers find the proposed plan acceptable and affordable	Conscious, future	Online and CAPI questionnaire and video pilots



Hierarchy	Research project	Objective	Engagement Optimiser	Method
Psychological needs	Best-in-class customer service and experience	Understand customer service offerings and innovations that customer expect now and in the future	Conscious, now and future	Co-creation, depth interviews and online survey
	Social tariff and debt management research	Understand the effectiveness of the current social tariff and debt management	Conscious, now	Focus groups, depth interviews, telephone interviews and co-creation
	Social tariff cross subsidy research	Understand how much customers are willingness to pay to cross subsidise	Now	Online survey
	Payments methods research	Understand why customers use payment methods other than direct debit	Conscious, now	Telephone survey
	Social media scraping	Analyse what customers are saying on social media about the water industry and Severn Trent	Now, conscious	Analysis of social media conversations
	Customer satisfaction tracker	Track customer satisfaction and other brand metrics	Conscious, now	Online survey every quarter

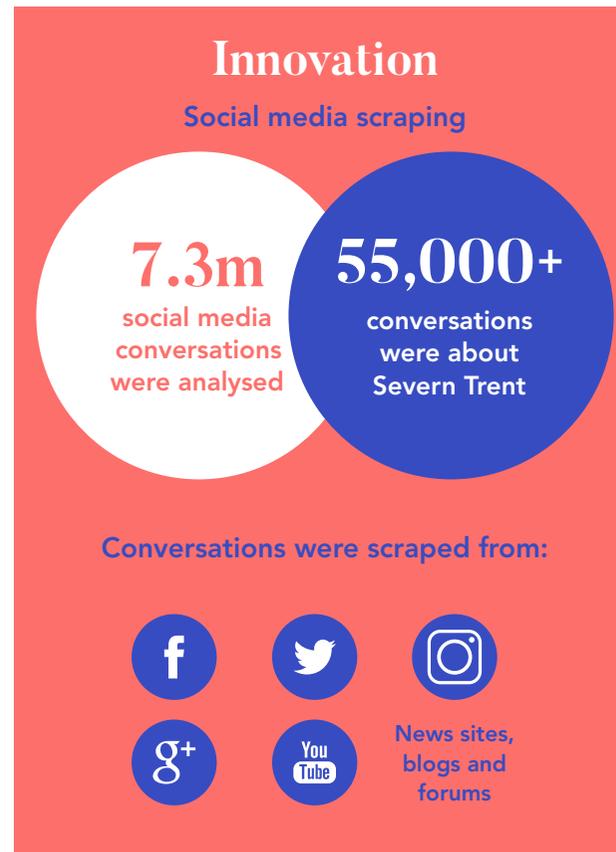
Hierarchy	Research project	Objective	Engagement Optimiser	Method
Self-fulfilment needs	Customer needs research and co creation	Understand customer needs and priorities, experiences of Severn Trent and opportunities for improvement in service	Conscious, now	Online communities, deliberative workshops, depths and co-creation
	Customer priorities	Understand what matters to people, communities and society and how Severn Trent can align to these	Unconscious, now	Workshops, specialist depth interviews and online community
	Marketing plan	Guide customer insight led campaigns	Conscious, now	Focus groups
	Land bank	Understand where Severn Trent could invest additional funds from land sale, with a focus on flood defence	Unconscious, future	Focus groups
	Environment deliberative research	Understand customer views on the environment in general and specifically on biodiversity, catchment management and river water quality	Unconscious, future	Deliberative workshop and depths
	Birmingham resilience comms	Understand perceptions of current water in Birmingham and reactions to the future temporary change in source	Conscious, now	Focus groups, taste tests, telephone interviews
	Social Purpose	Explore customer perception of responsible businesses, our broader role in society and a range of corporate social responsibility initiatives	Unconscious, now	Focus group and depth interviews
	Deliberative research on uncertainty	Understand how we should approach investment which is uncertain, and in particular in relation to supply and demand / climate change uncertainty and the water framework directive	Unconscious, future	Deliberative workshop and poll on Tap Chat

## Challenge 3: How to listen to customers without asking them questions?

Customers can give you lots of information by their behaviour or by their communication with others. 'Revealed' behavioural understanding (e.g. operational or complaints data) or indirect customer feedback in the case of social media data provide an invaluable data source. The CEG challenged the company with the creation of 'new' knowledge on customer preferences through the research programme needs to sit alongside inputs which are generated organically to fuel the overall triangulation process. We argued that this data provided opportunities to *listen to the dog that doesn't bark*. Understanding what customers may be saying to others but are not explicitly talking to the company about can be hugely surprising. Observing customer behaviours that one would expect but are in fact absent is similarly revealing.

### Company response:

The company accepted the challenge and an example of the action it took is provided below.



### Some key findings:

- Women are more likely to post on social media about Severn Trent, and often at night time – suggesting our contact centre should have longer opening hours.
- Customer sentiment about Severn Trent is largely positive. Customer service is generally perceived to be prompt and effective.
- 80% of 'customer pain point' conversations concern uncertainty. E.g. customers are unclear what should not be disposed of down sewers, customers want to know how much water is used by washing machines, dishwashers, etc.
- Severn Trent apprenticeships and community initiatives help drive brand advocacy.



## Challenge 4: What to talk to customers about?

A defining requirement of the work with customers to inform business plan decision-making is the alignment of the required research topics (what to talk to customers about) with the business planning programme so that insight arrives at the right time. In addition, the CEG challenged the company to ensure alignment of tools and tactics with the strategic framework at the heart of the whole programme.

This has allowed the company to determine the optimal programme and sequence of individual projects alongside data analysis and other evidence to understand customer and regulatory requirements and balance these with the needs of the business to build its PR19 plan.





## Summary: The research programme design

Consideration of the challenges on strategic and tactical quality, which was the a priori step before beginning any work, has delivered a customer insight programme which ensures that:

- There is a clear investment case for all components of the work and a rationale for Who to talk to? How to talk to customers? How to listen as well as ask questions? and What to talk to customers about?
- Gaps were filled and emerging priorities further investigated which best managed the company's investment of customers' money.

- The work was designed to develop iteratively and ensure the sequencing built a continuing evidence of 'new' knowledge and did not repeat itself.
- All available data sources and opportunities to supplement the research programme (e.g. social media work) were taken account of.
- Behavioural understanding and frameworks were deployed to ensure the work would link to real world behaviours in practice.

The company took an agile approach, anchored in the framework, to fill any gaps in the programme, as business requirements developed over the course of the PR19 programme.

The Water Forum has challenged the company on the design of each project (for example, on appropriateness of approach, sampling and audience). It also challenged on rigorousness of analysis and robustness of conclusions in order to validate the quality.

Finally, in order to fully assure the quality of the programme, the Water Forum asked the company to seek independent assurance, for example getting the design of the willingness to pay research peer reviewed by an independent expert. To find out more, please see [Appendix A1: Engaging Customers](#).

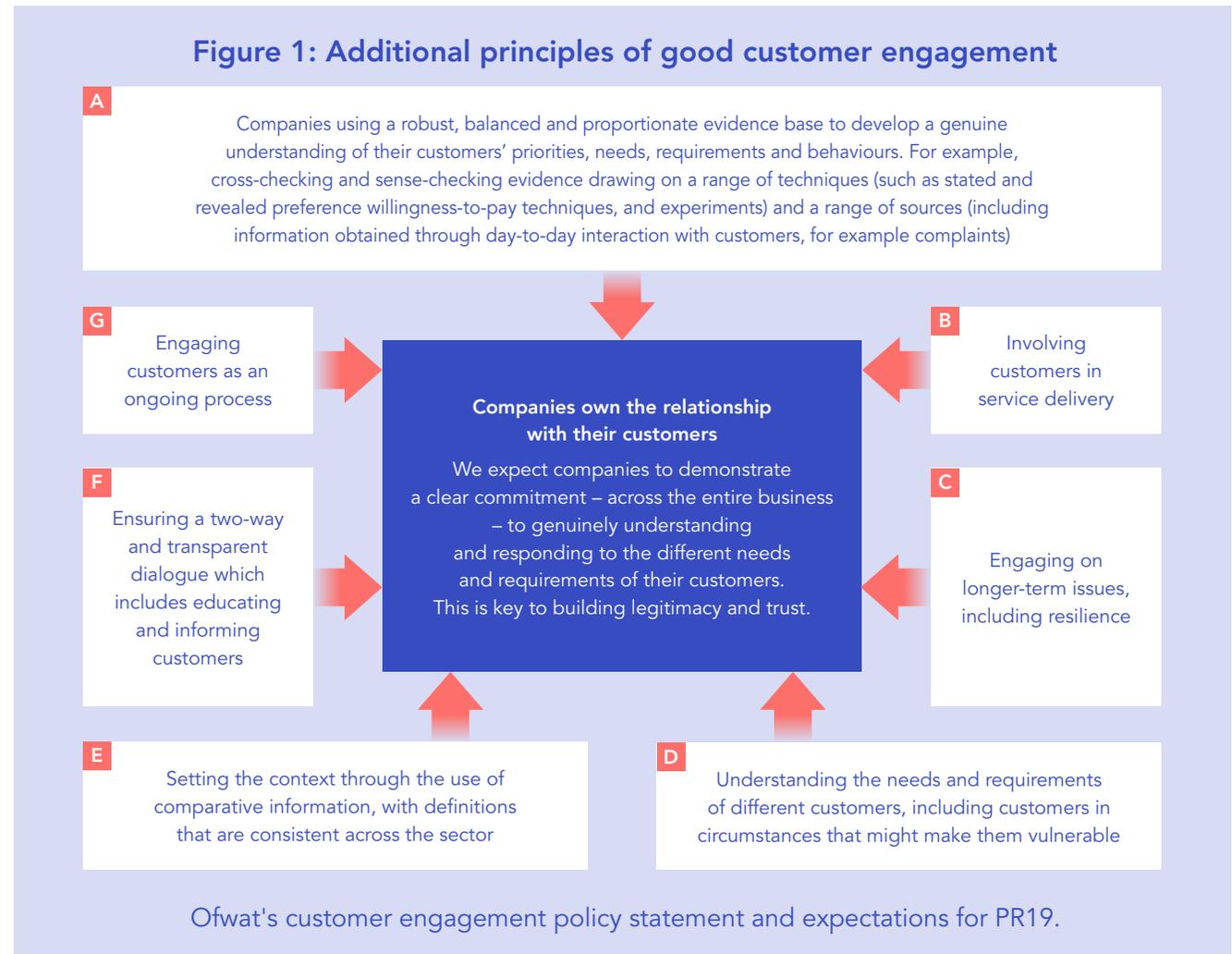
# Principles of engagement

In the previous section, we discussed how we challenged the company to ensure both the strategic and tactical quality of its customer insight programme.

Leading on from this, we present the list of most significant challenges in relation to the design and delivery of the customer insight programme.

We have categorised the challenges according to the principles of good customer engagement published by Ofwat (see figure to the right), in order to provide the reader with a structure and clear line of sight between the challenges, company response and Ofwat requirements.

Please click to see relevant challenges.



## A. Robust, balanced and proportionate evidence base

There was a major challenge that resulted in the strategic framework. This section summaries some of the more detailed challenges that arose around this topic.

### Challenge on establishing a strategic insight framework

Water Forum Challenge	Company response
<p>The company should develop a strategic framework for market research and customer insight, with a clear rationale for the chosen approach and research tools used.</p>	<p>The company agreed that it would develop a programme of work to target the key customer outcome of building a reservoir of trust, from customers of today and tomorrow.</p> <p>As discussed in the strategic quality section, the company has set out an initial hierarchy of customer needs, taking into account the fact that the drivers of satisfaction / dissatisfaction are different at the different levels of the hierarchy.</p> <p>The research programme is predicated on the strategic framework, and can be demonstrated to be effective and efficient as a result.</p>
<p>The company was challenged to base the hierarchy of customer needs on the insight from its research on customer priorities. The hierarchy would help to add structure and definition to the research objectives and in particular target the willingness to pay research appropriately.</p>	<p>The company has established a hierarchy of customer needs, based on the 2016 research on customer priorities. It then conducted a full review of the past 10 years of customer research in order to challenge and validate the hierarchy.</p>
<p>The company was challenged to develop a programme of work to target the key customer outcome of building a reservoir of trust, from customers of today and tomorrow.</p>	<p>The company has developed research packages centred on the hierarchy of needs and targeting all levels of the hierarchy from basic needs through to self-fulfilment.</p>

## Challenge on the range of research techniques, approaches and methods

Water Forum Challenge	Company response
<p>The company should include customers who have no previous experience or awareness of an issue in its research, and also include issues that may be important to customers both consciously and unconsciously.</p>	<p>The company agreed that it would include both customers with experience of service failure in the research, as well as those who have not experienced service failure or who have not had recent contact with Severn Trent.</p> <p>Research topics will include those which customers might not have consciously considered (e.g. resilience) as well as those they might experience on a day-to-day basis (e.g. taste and appearance of drinking water).</p>
<p>The company was challenged that the research tools and techniques need to take into account the Strategic Framework Engagement Optimiser Model developed as described in the Tactical Quality section. This considers whether the issue presents itself now or in the future, and what is conscious or unconscious in customer's minds, and suggests appropriate tools for each quadrant.</p>	<p>The company has developed an arsenal of research techniques covering each of the Engagement Optimiser model.</p> <p>For example, for topics such as resilience, which are both unconscious and future facing, they have used deliberative research, which builds awareness and uses active participation to get opinion. Issues such as customer service and complaints handling can be analysed using social media and customer contact data.</p>

## Challenge on undertaking revealed preference research

Water Forum Challenge	Company response
<p>The company was challenged to consider constructing an enhanced customer service level offering that would enable it to put a value on different aspects of service – as a revealed preference experiment. This would involve offering a segment of customers a different level of service, accompanied by different pricing. This would test whether customers would wish to sign up to a service package, with real life financial implications.</p>	<p>The company chose not to take this suggestion forward due to concerns about delivery feasibility of a differentiated service / price package, as well as potential concerns from customers about a differentiated level of service / pricing.</p> <p>Subsequent research showed that customers considered different price and service offerings inappropriate for a water company.</p> <p>The company considered alternative revealed preference proposals from research agencies, including a proposal to undertake a project on river pollution. Following discussion with the sub group (who considered the proposal to be another form of stated preference) the company elected not to take this forward.</p> <p>The company has taken forward a proposal for avertive behaviour revealed preference research on supply interruptions. It was noted that the sub group challenged that it does not consider this to be truly revealed preference but accepted that the approach would yield actionable insight, and an alternative valuation data point from a study, which is very different from the Willingness to Pay valuation research. The results of this study have been used in the triangulation of valuations in order to determine the company's incentive rate for interruptions to supply.</p>

## Challenge on listening to what customers are saying, without explicitly asking them

Water Forum Challenge	Company response
<p>The Water Forum challenged the company to use behavioural research in its programme.</p>	<p>The company noted that this is a fair challenge and one that it made several attempts to resolve within the research programme. Looking forward, the company recognises that behavioural research should form part of future customer engagement, and has already been utilising behavioural insight and data analysis to run more targeted campaigns (such as a direct debit nudge campaign and a water efficiency campaign). The company is also planning a trial to observe changes in water consumption when a smart meter is introduced for a group of households.</p> <p>Behavioural economics consultants at Frontier Economics were involved in reviewing the Willingness to Pay research.</p>
<p>The company was challenged to make use of operational data as well as the insight from research.</p>	<p>The company has analysed contacts and complaints from customers over the past few years. This has revealed interesting insight, for example the analysis of customer complaints has revealed that low pressure is a bigger issue than the company has previously considered. This finding has then been sense checked against outputs from research sources.</p>

## Challenge on the approach to triangulation

Water Forum Challenge	Company response
<p>The company was challenged to provide a clear plan for the approach to triangulation and a rationale where judgement is being used.</p>	<p>The company has presented the Water Forum with its approach to triangulation. Its approach to triangulation consists in two parts, which go “hand-in-hand” together – the first is the “synthesis and judgment” in the Appendix A1: Engaging Customers, which is used for developing the Performance Commitments, informing targets and validating incentive rates and strategic investment proposals. The second is the triangulation of valuation data, used to set robust incentive rates and in cost benefit analysis.</p>
<p>The company was challenged to avoid having a positive confirmation bias in triangulation and to look at how outliers are handled and have a clear strategy for handling them.</p>	<p>The company has commissioned independent third party assurance on the triangulation of valuation data (from Frontier Economics) and on the Appendix A1: Engaging Customers of customer insight.</p>
<p>The company was challenged to incorporate in-depth qualitative research in the process of triangulation.</p>	<p>Within the customer insight Appendix A1: Engaging Customers the company has incorporated the insight from both qualitative and quantitative research.</p> <p>Insight from qualitative research has also been used in the validation of the outliers in the Willingness to Pay results, which can be found in Appendix A1: Engaging Customers.</p>

[Click here to see Appendix A1: Engaging Customers](#)

## Challenge on getting third-party assurance

Water Forum Challenge	Company response
The Water Forum challenged the company to seek third-party assurance in order to provide validation that the findings from the research programme have been accurately summarised and that the conclusions are valid.	The company has commissioned independent third party assurance on the <a href="#">Appendix A1: Engaging Customers</a> of customer insight (from Trinity McQueen, a research agency who have not been involved in any other aspect of the research programme).

## Challenge to expand the choice of research agencies

Water Forum Challenge	Company response
The Water Forum has challenged the company to expand its choice of research agencies and bring new ideas and expertise from outside the sector into the research programme.	The company has responded by tendering projects with new agencies (following challenge by the Water Forum) and commissioning key projects with agencies from outside the water sector. This has led to insight based on different lenses and approaches.

### Conclusion

The Water Forum is satisfied that the result of all of these challenges was a balanced and proportionate evidence base.

## B. Involving customers in service delivery

The company addressed this issue with commitment and energy. Co-creation workshops, attended by members of the Water Forum, the Executive and the Board (not all at once!) were judged to be excellent. A variety of stakeholders were engaged with expert groups on subjects ranging from vulnerability to strategic investments.

### Challenge on co-creating propositions with customers

Water Forum Challenge	Company response
<p>The company was challenged to consider the scope for co-creation in its research plan.</p>	<p>The company commissioned leading research agency Britain Thinks to deliver series of co-creative sessions with customers within the insight programme. The Water Forum, members of the Severn Trent Board and the Exec team were invited to attend. This has provided the Water Forum with first-hand assurance of the quality of the engagement and buy in from senior members of the company.</p> <p><b>The use of co-creation has focused on five key areas:</b></p> <ul style="list-style-type: none"> <li>• Communication and engagement – to determine a series of practical recommendations for communications on the topics they were most interested in hearing about.</li> <li>• Metering – refine the metering strategy and build a communications tool kit.</li> <li>• Customer service propositions – developing and refining future propositions to test in further research</li> <li>• Helping customers who struggle – improving and promoting social tariff and assistance scheme offerings, including designing text message reminders after missed payments and testing eligibility criteria and bill discount levels.</li> <li>• Education with future customers – refining and testing education propositions with teachers.</li> </ul> <p>Where appropriate, the company used expert groups – for example, co-creative sessions were conducted with teachers in the early stages of designing the future education programme in schools.</p>

## Challenge on co-creating propositions with customers

Water Forum Challenge	Company response
The company was challenged to consider the views of stakeholders and other partner organisations.	<p>In 2017, the company ran a series of stakeholder workshops on the strategic investment areas and vulnerability. The company regularly engages with partner organisations such as those involved in the catchment-based approach, flood authorities and local resilience forums.</p> <p>The company also ran two expert co-creation workshops for financial vulnerability (January 18) and service vulnerability (November 17) where it co-created assistance proposals with expert organisations.</p>
The company was challenged to consider co-creation as an ongoing tool in the delivery of the plan.	<p>The company is planning to engage with customers during the delivery phase of the plan, and in particular when considering scheme feasibility and benefit valuation for the cost adjustment proposals.</p>
The company was challenged to consider the Ofwat Tapped In report and how it was going to engage with customers through more active participation.	<p>The company arranged a session at a main Water Forum meeting to discuss customer participation. Experts in the business showcased three examples – the “leak locator” trial, the direct debit nudge campaign and the award nominated insight led water efficiency campaign. These examples were supported by a wider set of case studies which have been collated in the Appendix A1: Engaging Customers.</p>

[Click here to see Appendix A1: Engaging Customers](#)



## Challenge on co-creating propositions with customers

### Innovation

#### Some of the key findings:

- Customers identified partner organisations that could help promote specific message, as well as times of life in which customers could be most receptive.
- Water efficiency messages could emphasise future water scarcity and the environmental impact of water usage.
- Sewer misuse messages should quantify the problem and major on language and visuals that deliver on impact.



## C. Engaging on longer-term issues, including resilience

The longer-term environmental issues can be difficult for laymen to understand and a great deal of explanation is required to empower customers to give robust opinions. The Water Forum was impressed by the quality of the customer engagement on these issues. Until you have seen customers enjoy a six-hour workshop on resilience, it is hard to believe that one could secure their attention and involvement.

### Challenge on the importance of engaging with customers on the environment and resilience

Water Forum Challenge	Company response
<p>The company was challenged to consider how the environment is reflected in the hierarchy of needs and in the research.</p>	<p>Engaging customers on the environment, and longer term issues that they do not consciously consider, is difficult and requires a considered approach. As part of this challenge environmental stakeholders on the Water Forum have considered how the environment is linked to the <a href="#">hierarchy of needs</a>.</p> <p>This difficulty has been reflected in the design of the deliberative research on the environment, which the chair of the Water Forum attended. She was able to witness the engagement and enthusiasm with which customers discussed quite detailed issues on the environment. The selection of an experienced research agency (Britain Thinks) and the well-designed stimulus material were major contributors to the success of the sessions. As participants developed their understanding of the environment they were able to participate in the debate in a more informed manner and their concern over the environmental impact of water companies increased.</p>
<p>The company was challenged on whether Willingness to Pay research provided adequate views on drought resilience.</p>	<p>The risk of requiring use of standpipes (in a drought) was included as a service attribute in the willingness to pay research, and the description went through thorough pilot testing.</p> <p>From the results, it appears that customers place low value on improving aspects of drought resilience (through their valuation of reducing the risk of needing the use standpipes) and the Water Forum challenged on whether this is due to customers concentrating on the more immediate service attributes such as leakage. The company accepted that it is hard for customers to compare a level of risk with other metrics such as leakage and therefore it discussed drought with customers in a deliberative setting, which allows respondents to be more informed and build awareness of the issue.</p>
<p>The company should set out a clear definition of what it means by resilience, when considering emerging challenges facing the company. Resilience is not a word that means a great deal to customers.</p>	<p>The company has talked to customers about resilience in a deliberative setting, using more customer-friendly language.</p>

## Challenge on the importance of engaging with customers on the environment and resilience

Water Forum Challenge	Company response
<p>The company was challenged to undertake deliberative research on how to deal with investment uncertainty.</p>	<p>The Water Forum challenged the company to be mindful of the strategic insight framework and conduct deliberative research on how to deal with investment which is uncertain. The company commissioned a deliberative workshop with leading agency.</p> <p>Britain Thinks to engage customers on the topic. The investment decisions faced by the company are not something that customers consciously consider; however, through engaging materials and expert facilitation, customers were able to debate the principles Severn Trent should consider and form opinions on proposed approaches.</p> <p>The feedback from customers shows that there is clear principled support for investing when the company has greater certainty whilst taking action to minimise the time to respond.</p> <p>Avoiding detrimental impact on the environment is also a key consideration for not investing in potentially unnecessary schemes.</p>
<p>The company was challenged on whether Willingness to Pay research provided adequate views on drought resilience.</p>	<p>The risk of requiring use of standpipes (in a drought) was included as a service attribute in the willingness to pay research, and the description went through thorough pilot testing.</p> <p>From the results, it appears that customer place low value on improving aspects of drought resilience (through their valuation of reducing the risk of needing the use standpipes) and the Water Forum challenged on whether this is due to customers concentrating on the more immediate service attributes such as leakage. The company accepted that it is hard for customers to compare a level of risk with other metrics such as leakage and therefore they discussed drought with customers in a deliberative setting, which allows respondents to be more informed and build awareness of the issue.</p>
<p>The company should set out a clear definition of what it means by resilience, when considering emerging challenges facing the company. Resilience is not a word that means a great deal to customers.</p>	<p>The company has talked to customers about resilience in a deliberative setting, using more customer friendly language.</p>

## D. Understanding the needs and requirements of different customers, including customers in circumstances that might make them vulnerable

### Challenge on how the customer is defined for inclusion in research

The Water Forum challenged the company to take a broader approach to thinking about customer, and take into account vulnerability, deprivation, different cultures and attitudes to water. The company responded by documenting its approach to describing all types of customers to be included in the research programme, as follows:

#### Domestic customers

- Those with joint or sole responsibility for paying the bill.
- Those contributing towards paying the bill.

#### High engagement with waterway customers

- Those living near waterways and are likely to be somewhat more affected by environmental factors to do with being near a waterway.

#### Service failure customers

- Those who have suffered a service failure e.g. water supply interruption, sewer flooding, low water pressure, etc.

#### Customers in financially vulnerable circumstances

- Customers who earn below a certain threshold and those whose disposable income is below a certain threshold.

#### Customers in vulnerable circumstances due to health / well-being

- Those who are challenged with either a physical or mental health and well-being issue (for themselves and / or family members).

#### Future customers

- Those living at home, not contributing to a bill but will be doing so within the next five years (primarily 18–24 year olds).

#### Non-English speaking customers

- Those that have poor comprehension of the English language either spoken or written. The company has identified the three main most-spoken languages outside of English from census data: Punjabi, Urdu and Polish.

#### Ethnic/Cultural customers

- Those who come from a minority ethnic and cultural background.

#### Digitally disenfranchised customers

- Those that either do not have access to the internet or choose not to use the internet.

#### Non-household customers

- Small, medium and large business customers.

#### Retailers

- Retailers look at the customer service aspects of the relationship with non-domestic customers.

#### Developers

- Larger developers.

## Principles of engagement

D. Understanding the needs and requirements of different customers, including customers in circumstances that might make them vulnerable

## Challenge on how the customer is defined for inclusion in research

Water Forum Challenge	Company response
<p>The company was challenged to broaden its definition of the customer to the wider consumer base and apply this in research as part of the strategic framework. The hierarchy requires further development, e.g. to include reference to the environment and to billing.</p>	<p>Multiple different types of customers exist within the Severn Trent customer base. The outcomes team has mapped out all the different types of customers from bill payers to those who consumer water but don't pay bills or visit our visitor centres. The research framework will map out who we are speaking to at each stage of the research and why.</p>
<p>The company was challenged that the decision to conduct the Willingness to Pay survey bill with payers and spouses will exclude many customers that are living with parents or renting and paying for water as part of their rental.</p>	<p>The recruitment criteria for the Willingness to Pay research was modified to incorporate young people who pay or contribute to their water bill through other people e.g. parents, landlords. A proportionate number of these types of respondents was achieved in sample.</p>
<p>The company should consider a broad definition of 'customer' – including for example non-regulated customers and non-bill payers.</p>	<p>Following on from the challenge above (in relation to the Willingness to Pay research), for subsequent research projects the company has considered whether participation should be limited to bill payers (joint and sole responsibility) or broader consumers.</p>
<p>The company should consider the needs of future customers.</p>	<p>The company noted the importance of the needs of the future customer, as well as current customers. The company has included a group of future customers in the Willingness to Pay and Customer needs research projects to understand their needs. This represented a proportionate but effective approach to understanding the needs of future customers.</p>

## E. Setting the context through the use of comparative information, with definitions that are consistent across the sector

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### Challenge on including comparative information within the research

Water Forum Challenge	Company response
The company was challenged to include comparative information within the research, where relevant.	Comparative information was included in the Willingness to Pay research and in the qualitative research with customers on Performance Commitments. It was also explored qualitatively in the customer needs deliberative research, in relation to understand the decisions participants made on prioritising service improvements.

## F. Ensuring a two-way and transparent dialogue which includes educating and informing customers

### Challenge on communication

Water Forum Challenge	Company response
<p>The company should ensure that customers are provided with information beforehand, so that they have a good level of understanding (when undertaking the immersive research). The company should also ensure that materials are suitable to the specific audience when undertaking immersive research.</p>	<p>The company agreed that the quality of information is key in the deliberative research. Water Forum members were invited to observe the research and note the engagement and understanding customers had of the materials.</p>
<p>The Water Forum considered that the more customers understand and are informed, the more decisions it can make. The company should ensure that customers are provided with appropriate information so that they have a good level of understanding (when undertaking the deliberative research).</p>	<p>The company has used deliberative research in which they used engaging and informative materials to raise awareness with customers so that it could make more informed decisions about the issues the company faces and future decisions they need to make.</p> <p>The company agreed that the quality of information is key in the deliberative research. Water Forum members were invited to observe the research and note the engagement and understanding customers had of the materials. The Water Forum was impressed by the information used in the deliberative research and felt it had a considerable impact on trust. The challenge it to replicate this form of engagement at scale.</p>
<p>The Water Forum challenged the company to respond to the desire from customers to have more communication and engagement on their water and wastewater service.</p>	<p>The company agreed that increased (and appropriate) communication is linked to trust and the hierarchy of customer needs – if customers trust the company they are more likely to listen and respond to engagement.</p> <p>Trust and engagement at the top level of the hierarchy will translate into action at the bottom level (e.g. water efficiency). It is also important to consider motive – trust can be earned by showing people that there is a motive in their own interest (for example saving water could also save them money).</p>

## G. Engaging customers as an on-going process

### Challenge to expand the choice of research agencies and thoroughly embed customer insight in the organisation

Water Forum Challenge	Company response
<p>The Water Forum has challenged the company to expand its choice of research agencies and bring new ideas and expertise from outside the sector into the research programme. The company has responded by tendering projects with new agencies (following challenge by the Water Forum) and commissioning key projects with agencies from outside the water sector. This has led to insight based on different lenses and approaches.</p>	<p>The company has also been working to embed customer insight more widely within the organisation. All research projects have included a formal de-brief back to the internal teams in the business, as well as being deliberately designed to involve internal teams in the design of the work at every stage. This has led to a high degree of engagement in the research outputs.</p>

### Challenge to establish an online panel to promote ongoing dialogue with customers

Water Forum Challenge	Company response
<p>The Water Forum challenged the company to set up an online panel to ensure that 'hard to reach' customers are included, and that complex issues e.g. PAYG and RCV are communicated in a way customers can understand.</p>	<p>The online community Tap Chat has now been launched as a direct response to Water Forum challenge. The community is intended to be the tool to continue an on-going dialogue with customers. It is clear that it will be effective at reaching a certain subset of the customer base. It is not an effective tool for reaching hard to reach customers like those that are digitally disenfranchised or those for whom comprehension of the English language is limited. The company will continue to use other offline methodologies to reach these types of customers.</p> <p>Research conducted with the community will continue to use best practice for ensuring that customers can understand the materials that are presented to them. The community can also act as a test bed for understanding if materials will be understood by the wider customer base.</p>
<p>The Water Forum asked how the online panel can be used to produce insight of the same quality as deliberative research.</p>	<p>The community platform can be used to conduct both qualitative and quantitative research. The community platform will facilitate good deliberative research. Information can be shared with members with a step-by-step approach to ensuring that those participating in the discussion understand what is being presented to them. Discussions and opinions can be canvassed in a similar way as they are in offline approaches.</p>

## Challenge to establish an online panel to promote ongoing dialogue with customers

### Innovation

Tap Chat is hosted on a Severn Trent branded website, and managed in partnership with Join the Dots, an independent market research agency. The website facilitates open and private discussions, surveys, quick polls and other engagement activities. Members are also encouraged to proactively start their own conversations on topics of interest to them.

Tap Chat provides a quick, easy and cost-effective approach to maintain a continuous active two-way dialogue with customers.

Collated profile information on members, for example age, gender, and location, giving the ability to segment the community for targeted work. Tap Chat represents the best of both worlds: the ability to have smaller communities to engage with on specific topics, and larger communities to engage with when a robust evidence base is needed for business decisions. Tap Chat will also facilitate wider dissemination of customer insight through its dedicated stakeholder hub that will act as a library for the insights gathered on the community.

# Continuous improvement

The Water Forum has been encouraged by the response of the company to its challenges and we are pleased to acknowledge the very significant progress that has been made. Nonetheless, there remains more to do.

We have challenged the company to develop ongoing, continuous customer engagement which runs independently of the Ofwat price review process. We can already see that monitoring of the customer's pulse is becoming more consistent within the business; for example, we are encouraged at the company's curiosity to explore customer sentiment when they have been part of an incident. The feedback from the customer may be frustration and antipathy but the company has recognised the opportunity to learn from customers and improve things in future incidents.

A number of Water Forum members have extensive experience in service delivery sectors such as retailing. The challenge from these members has been that for customer-centricity to be really powerful, every colleague, every touch point, has to reinforce the customer's confidence in the proposition. For most organisations, this requires fundamental cultural change. The Chief Executive's Bike-on-a-Boat workshop recognised this. Water Forum members were impressed, partly by the innovative and engaging content and partly in terms of conviction; the presentation was delivered over 65 times to ensure it reached all colleagues. However, changing culture is more than one presentation and our challenge to the company is to continue reinforcing the necessity of putting the customer first at all times.

As well as challenging the company on continuous improvement and supporting the leadership in prioritising the customer, there remain substantive research tasks to do. This is not surprising. Our view is that customer engagement is never 'done' and that the company needs to maintain a restless curiosity about how to serve its customers better.





## To do list – future exploration of customer needs

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### Deepening customers' understanding to facilitate more informed choice

We were struck by the customers who attended the co-creation and deliberative workshops having something of an epiphany when they learned more about water. It wasn't that they were particularly negative to start with, but they were very positive when the research company explained key issues, such as metering. The company got some great ideas from customers who understood. We would like to see this effort continue because helping some customers understand a topic in-depth has the potential to enable the company to help many customers with the insight it has gained.

### Behavioural economic experiments

There have been some early behavioural experiments which have yielded interesting results such as the Matching Plus scheme in the [Retail chapter](#). However, their success has merely quickened the appetite of the Water Forum to do more and learn more about how to encourage customers to make choices which benefit them

and wider society. For example, we suspect that behavioural experiments around reducing usage and wastage could be very insightful.

### Revealed preference testing

Using revealed preference techniques can be less straightforward than commissioning a stated preference survey for the purposes of valuation. The company has taken forward one type of revealed preference research, looking at averted behaviours, which has yielded a valuation for a key performance measure, and has used this in the triangulation process to set incentive rates. We believe further work to identify areas where revealed insight might yield actionable insight are worth pursuing across the business. For example, this might be used to align certain communication channels to certain topics.

### Further integration of customer data into decision making

The company has started to use operational data to inform decisions across the business. However, this approach is in its infancy in most

organisations; we see an opportunity for the company to get smarter at using Artificial Intelligence to process data and generate real insights that would help the company serve its customers more accurately.

### Expand the online community panel

The launch of the online panel was in response to Water Forum challenge and we are pleased to see the contribution it has already been able to make. We believe that more use of the panel will provide more insight and enable the company to listen to customers quickly and efficiently.

### Systematic listening to the customer voice in social media

Another Water Forum challenge was to search social media to see what customers were saying about the company. The value in this is that one can listen to customers' views without the potential bias introduced by company generated questions. We would encourage the company to leverage this capability on a systematic basis.



## Summary of future opportunities

Ofwat asked us to consider customer engagement quality in the PR19 process. This section takes us slightly further. The items in this section are not challenges in the formal sense which we have logged elsewhere but suggestions for the company to consider going forward. They have been offered in the spirit of continuous improvement and reflect the Water Forum's ambitions for an increasingly sophisticated approach to customer engagement in the company.

It is heartening to report that the company has received these suggestions very positively and indeed, all the suggestions above are being considered in future work planning.





# Assurance

The Peer Review team questioned the sub group lead, and is assured that the work done by the sub group has been carried out in an effective and independent manner.

The expertise in this field brought to the table by the sub group has made a significant difference to Severn Trent's business plan and added value to the process.

**For example:**

- Adoption and development of the customer insight framework based around the hierarchy of needs.
- The way that the company recognises the importance of the framework and the impact of its application beyond the work of the Water Forum, being open to developing frameworks for other elements of business planning (e.g. PCs/ODIs).
- Readiness to carry out in-depth customer research activities to direct investment proposals, even with time and financial constraints.

The work of this sub group made a significant impact on the development of the business plan by establishing a strategic framework, which not only informed the business plan but also the challenges made by other Water Forum sub groups.



# The Water Forum's concluding views

The customer engagement now is of a high standard, being robust, rigorous and comprehensive in its scope.

The Water Forum has challenged the company extensively on the quality of their customer engagement.

- We challenged the company to produce an overarching strategic framework for the customer engagement programme to make sure the expenditure was both efficient and effective.
- We challenged it to consider the framework from a conceptual point of view and then validate that with real customer research projects.
- We reviewed all of the tactical work and challenged it in numerous ways to improve the quality of their implementation. We subsequently secured independent assurance on the quality of the work.

We are pleased to report a step change improvement in the quality of the customer engagement as almost all of our challenges have been accepted. The customer engagement now

is of a high standard, being robust, rigorous and comprehensive in its scope. Perhaps most reassuringly of all, we anticipate that the company will continue to improve and expand its customer engagement so that it continues to inform business decisions that impact customer experience.

We are pleased to report a step change improvement in the quality of the customer engagement which is of a high standard.



# Retail

The retail chapter describes our challenges to the company on both the affordability of Severn Trent's services, but also the measures the company puts in place to support vulnerable customers.

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# Introduction – The Retail Sub Group (RSG)

waterforum

Most activities of any water company are invisible to the customer.



**Karen McArthur**

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Customers don't see the pipes underground, they don't admire the sophisticated water treatment processes and they are unaware of the remedial works that maintain the quality of the infrastructure every day.

The only way most customers touch their company is through the provision of bills and the contacts made when things change. Our hypothesis was that the retail operation is not only important in and of itself, but it acts as a quality cue for activities of which customers are only dimly aware.

We recognise that the company has not been in a position to create separate Performance Commitments at this time as they are being developed centrally at Ofwat. Customers will benefit from the more stretching PC that the company is proposing going forward (C-Mex, D-Mex). Nonetheless, in the course of its discussions, the Water Forum has been presented with information on satisfaction and trust ratings.

Our Consumer Council for Water (CCWater) members have also updated the Water Forum from time to time on performance, particularly including complaints. In fact, the Chair has attended regional CCWater meetings to view this process at first hand. We have been able to conclude that, excluding extraordinary events such as the Freeze Thaw incident of 2018, customers have no issues with accessing its service, are satisfied with its quality and find their water bills affordable.

However, in the meantime, Ofwat has asked us to focus on customers for whom affordability, accessibility and personal circumstances present very real challenges. At PR14, the company implemented a number of affordability assistance schemes and a basic level of support for priority service customers. Whilst these schemes represented an improvement, this chapter will show how we challenged the company to further develop its service. The chapter addresses Affordability and Vulnerability separately below.



# Scope and focus of Water Forum challenge

Ofwat's PR19 Methodology asks Customer Challenge Groups to explicitly comment on, challenge and show customer evidence by demonstrating the following:

## Affordability

- The robust evidence in the business plan to show how affordability will be delivered for current and future customers and those struggling or at risk of struggling to pay.
- Evidence on how well the company understands customers and their needs and how this has effectively been translated into its customer service proposition.
- Customer support for the approach taken by the company (see [Appendix A1: Engaging Customers](#)).

## Vulnerability

- Evidence that the company's approach to vulnerability is targeted, efficient and effective with evidence cited in its report.
- Performance Commitments that hold the company to account in addressing the needs of vulnerable customers supported by robust evidence.

The RSG recognised that measures of service are currently in development (C-Mex) and so they have not currently been considered.



# How the RSG exercised its remit

The RSG has been extensively involved in contributing to and challenging the company approach. Meetings were held with the company throughout the programme, between the formal Water Forum meetings.

The meetings held to account on progress, challenged on emerging hypotheses and offered comments on service propositions. For example, members attended co-creation and customer deliberative sessions to see first-hand the quality of engagement and customer needs. The RSG shared updates and invited debate from the wider Water Forum at every stage. This ensured that key challenges were considered by the main Water Forum members as well as the RSG.

The RSG was led by an expert, with extensive experience in championing consumer advocacy in other sectors. This proved invaluable in contributing experience beyond the water sector and introducing new approaches and thought leadership.

The RSG met regularly and maintained formal minutes and an RSG challenge log. This ensured that challenges were recorded as they were raised and subsequently addressed by the company. Of course, not all challenges were adopted in the business plan but all were accorded serious consideration. Periodically, outstanding challenges were reviewed and prioritised to ensure the company focused on the most important issues first.

We are pleased to note that the company recognised our expertise, welcomed our input and responded to our challenges.



# How the company listened

The company's understanding of customer views on affordability and vulnerability has centred around the below key research projects:

These have been underpinned by wider insight from the company's 'Voice of the Customer' programme, social media scraping, the quarterly customer tracker and insight from historic research on topics such as payment options.

In addition to this, the company held workshops with expert stakeholders active in their region, in both affordability and vulnerability, and undertook benchmarking activity with leaders in these areas.

There is more information on this in [Appendix A1: Engaging Customers](#).

The approach to customer research and the links to challenges are shown later in the chapter in our [concluding views](#).

Overall, the RSG saw that the extent and approach taken to listen to their customers' needs was robust and the way findings interpreted rigorous.



# The Water Forum's challenge of Severn Trent's approach

This section considers the two main focus areas in turn: **affordability** and then **vulnerability**.





# Affordability

The Water Forum challenged the company on how its Affordability plans were already benefiting customers and how they would continue to do so in the future.

Progress needed to be validated through evidence in the business plan. The full details of Affordability can be found in the [business plan](#). The Water Forum also sought to challenge the company on how its research supported the Affordability propositions and this has been noted in the 'How the company listened' section above.

In order to fully demonstrate how the Water Forum challenged the company throughout the process and how the company responded, all challenges have been documented in the [challenge log](#). To streamline and effectively demonstrate these challenges for the purpose of this report, the key strategic challenges have been pulled out of the log and highlighted in this section. The same approach will be used in the Vulnerability section later on.

## Context to the Affordability challenges

The Water Forum noted early on that Affordability covers a broad range of issues such as overall bill levels, levels of bad debt, cost to serve and supporting customers who are struggling to pay. This section explains how Severn Trent has responded to challenges to effectively and efficiently address affordability including helping those customers who are struggling to pay.

The "social tariffs and debt management" research (see [Appendix A1: Engaging Customers](#)) and customer needs research helped to identify four key customer groups. The expert stakeholder group identified a fifth group which was customers who were new to the UK or for whom English is not their first language. For each group, the company needs to provide support in different ways as they struggle to pay and so respond effectively to their circumstances.



**The final five groups are:**

1. Longstanding
2. Sudden and severe
3. Borderline
4. Struggles with finances
5. New to the UK/English not first language

One of the first tasks was to scope the size of the customer need. Research completed by the Consumer Council for Water (Water Matters, 2016) estimated that nationally in England, 11% of customers find their water bills unaffordable. Extrapolating this, to the company (serving approximately 4 million households), suggests around 440,000 households within the region could be finding their bills unaffordable.

The company, through its quarterly tracker research, which can be found in [Appendix A1: Engaging Customers](#), has also coincidentally identified that currently 11% of its households find their bills unaffordable. The company undertook wider economic modelling to assess whether this figure would be likely to change over the period of the AMP. The analysis showed that 10% of customers could still be in need of support. However, in building its AMP7 Performance Commitment, the company has taken a prudent approach of aiming to support 11%, of which the RSG is supportive.

For AMP6 (2015–2020), the company had developed a set of proposals and targets for supporting customers struggling with affordability. However, the RSG challenged whether these would be sufficient or appropriate

in the future. Changes in the external financial environment such as the roll out of universal credit and possible impacts from Brexit are likely to impact on the finances of customers and could result in instability and uncertainty. The RSG challenged the company to be flexible to respond to this volatility; five years was too long a period to hard-wire in any solution. They suggested that the solution should be reviewed within the AMP7 period (2020–2025).

The company has agreed with this challenge and has built a review period into its Performance Commitment after three years and regular assessment that proposals were still fit for purpose.



## Challenges

In addition to the challenges above, there were **63** challenges that emerged during detailed discussions.

This section summarises the eight most important challenges in relation to affordability.

Further information on each of these challenges can be found in the company's [business plan](#).





## Challenge 1: Are the existing affordability assistance schemes reaching the right customers, those most in need or who might benefit most?

At the last price review, the company's flagship response to the issue of affordability assistance for customers who are struggling to pay was to develop the social tariff Big Difference Scheme which had a target of helping 35,000 customers each year. The company works in partnership with Auriga Services and Citizens Advice to look at each applicant's finances holistically, assessing their expenditure, disposable income and, if appropriate, reduce the customer's current water bill by up to 90%. As the RSG heard at one of the expert round-table sessions, this scheme was well regarded and widely used by debt agencies.

However, the social tariff scheme does not address arrears. The RSG felt that, while the scheme supports customers in some circumstances and with their current year bills, there are a group of customers in arrears who have needs that require more extensive support.

In addition to this, the RSG challenged whether the social tariff scheme is reaching those most in need (although it acknowledged that the company had met its AMP6 commitment). One potential obstacle to reaching customers could be that they are reticent about identifying themselves as struggling to pay for a range of reasons and therefore do not apply for support through this scheme. The RSG, using their external experience and subject matter expertise, thought this a real risk.

The RSG observed that the next AMP period might see more customers with affordability concerns – for example, increasing numbers who are on benefits, shifts towards the gig economy and the continuation of zero-hours contracts,

could all impact on these customers' ability to pay as well as the wider economic context. The RSG felt that the company should seek to anticipate groups of customers who might struggle, their broad characteristics and so be in a better place to proactively identify them and tailor services accordingly.

**Company response:** The company responded positively to this challenge. It developed a number of "personas" based on the insight from its customer research and struggling to pay expert workshop. These describe the key characteristics and circumstances of customers in financially vulnerable circumstances and enable service offerings to be mapped against them. The hypothesis was that different personas could have different needs and that responding to each in a more focused way could be both more effective and efficient. For example, the needs of a 'longstanding' might be very different to the needs of a 'sudden and severe'. Further detail on the personas can be found in the company business plan.



## Challenge 2: The company should offer a broader range of affordability assistance schemes to support customers

The social tariff scheme, called the Big Difference scheme, has been in existence since 2015. Target numbers have been met and feedback from customers on the scheme is positive. The RSG still challenged the company to review and test its effectiveness.

**Company response:** Through its customer engagement programme, the company carried out quantitative and qualitative research, including in-depth interviews and co-creation sessions with customers. The objective of the research programme was to understand what customers want in terms of affordability assistance support, how effective the current support is and what more could be done to improve it.

The social tariff scheme currently provides up to a 90% bill discount (subject to customers meeting specific criteria). Interestingly, the research indicated that a 70% bill discount would still be seen as impactful, this level would significantly increase the numbers of customers that could be helped for a given investment. Input from customers suggested that the criteria for the Big Difference scheme should be reviewed to ensure the scheme deployed best practice and continually evolved to ensure that it continued to meet the needs of this customer target group.

Having identified the characteristics of the most financially vulnerable customers and understood their needs, the RSG was delighted to see the company develop more flexible support options, which might be relevant to different customer groups / “personas”. The company produced a suite of options which were mapped against the identified “personas” to enable the company to target appropriate customers. Further details on this can be found in the company’s business plan.

To deliver against Ofwat’s requirement for support to be effective and efficient, the company will be refining the ways in which the schemes are operated. Research has indicated that the application process for schemes could be made easier and the company has responded to this effectively, including by looking to simplify the reapplication process for the social tariff scheme. It also includes condensing the number of social tariff bands from nine to four.



### Challenge 3: Can the company develop affordability assistance schemes that help customers take better control of their payments, help customers get into new payment habits /rehabilitation?

In addition to providing schemes which help with in-year customer bills, the RSG challenged the company to ensure it had schemes that also helped customers take better control of their payments and address customers’ historic debt.

**Company response:** The company demonstrated how it currently addresses this challenge. Further details on the support option can be found in the company’s business plan.

However, the company accepted the RSG challenge that it should go further. As a result, the company developed a new concept called Matching Plus. The Matching Plus scheme deals both with current payment issues and historical debt through creating a “partnership” or contract approach. It was devised through consultation

workshops with expert debt agencies etc. to discuss the terms of the proposed scheme. Furthermore, there was a co-creation session with customers to discuss social tariffs and debt, which showed significant support for this scheme.

#### How will the scheme work?

Matching Plus is 3 x 13 week payment plan.

- If Plan 1 maintained = Payments matched by ST\*
- If Plan 2 maintained = Payments doubled by ST\*
- If Plan 3 maintained = All arrears > 2 years cleared

#### What are the criteria for Matching Plus?

- At the moment only promoting through STTF\*\* as relationship built with customer
- Customer will have been declined a grant
- Account balance £750–£3,750
- No payment within last 12 months

Despite being grounded in robust customer insight, it was impossible to forecast whether it would work in practice. The company adopted a design, test, and review and adapt framework and launched the trial in August 2017. By December 2017 they had signed up 668 customers to participate in the trial, increasing to 1,483 by the end of March 2018. As at the end of March 2018, 203 customers had completed stage one of the scheme, and 56 had completed stage two. This has resulted in customer payments of

£70k. Thus, the scheme has shown some success to date but will be kept under review to evidence that it delivers the best outcomes for customers. Assuming successful outcomes, it will be fully launched ready for 2020.

### Innovation

The Water Forum commends the company for the way it has addressed this customer need to get back in control of payments. The proposition is innovative. The initial results show that the scheme provides a real incentive for customers to get back into regular payment habits, providing them with structure and support in equal measure. The approach to testing the proposition is also innovative. The approach has demonstrated that running a pilot project can be an effective way to test new services in a live environment. The work on the Matching Plus scheme is a neat illustration of the challenge-response dynamic that successfully delivered new options for customers.

\*Severn Trent

\*\*Severn Trent Trust Fund



## Challenge 4: The company should identify the most appropriate ways to communicate with customers and raise awareness of the support available

The term “struggling to pay” covers a wide variation of income groups and customer types. Some examples of these are:

- Those who are struggling to manage their money.
- Those on intermittent income.
- Those on a low income and juggling bills.

The RSG were concerned that some of these customers might not approach the company for help for a variety of reasons, such as feeling stigmatised or not perceiving themselves as in need of help.

**Company response:** The company shared its plans to drive insight from its payment systems and intelligent use of data (including data sharing through credit reference agencies). This could proactively identify customers who might benefit and enable the company to reach out to them directly in a sensitive and targeted way.

However, the company and the RSG concurred that there was still a need for wide ranging and multi-channel communication and awareness raising. At facilitated co-creation sessions, the company explored ways in which it could ensure that its support messages landed with customers. One of the key findings to come out of the research was the benefit of engaging with trusted organisations, already embedded in the community. The use of these organisations was identified as being particularly useful for those who are financially vulnerable and those from other cultural communities.



## Challenge 5: The company should consider funding some of the affordability assistance programme themselves out of profit

The RSG challenged the company to consider funding some of the affordability assistance programme out of profits as it felt customers would be more willing to increase their contribution if the company did this.

**Company response:** The company completed a specific piece of research to understand the extent to which its customers would be willing to fund social tariff support in the future. The research found that a significant majority (67%) of customers are prepared to pay £8 per year to subsidise the social tariff support scheme.

The company separately asked customers how much they would be willing to contribute. The research found that a significant majority (67%) of customers are prepared to pay £8 per year

to subsidise the social tariff support scheme, no matter whether the company contribute themselves or not. The company shared the outputs of the research and the Water Forum were supportive of the proposal to increase the social tariff cross subsidy to £8. This additional support, alongside scheme improvements, will enable the company to increase social tariff assistance from 35,000 customers in 2017/18 to c.97,750 customers from 2021/22 onwards.

The company therefore does not propose to provide further funding for the social tariff scheme as the increase in cross subsidy was larger than expected and allows a step change in this support but noted the Forums ongoing challenge in this area.

The company expressed the desire to do more to support the communities where it operates, many of which are in the most deprived regions in the UK. In addition to many customers struggling to pay there are cuts to social and public services meaning there is less investment in social amenities.

As one of the largest companies in the region, the company felt it had both the tools and opportunity to make a genuine difference. This is why the company proposes to establish a community dividend which will include a new contribution funded by 1% of its profits. Funded by the company's investors, this will run alongside the company's volunteering programme and contribution to the Severn Trent Trust Fund, and the existing customer dividend which shares the benefits of outperformance.

The aim of the community dividend is to make a real difference to communities by building a lasting legacy, helping the most vulnerable customers, enhancing the environment and building social infrastructure. The company will be establishing an advisory board that will include representatives from customers, charities, government and business. This group will help inform how the company's contributions can maximise the positive impact on the community and encourage other bodies, notably business and government, to match their funding.

The Water Forum welcomed this idea and notes that further work is in progress to establish the fund.



The RSG noted that the company has demonstrated its commitment to assisting customers who struggle with affordability.

- It already makes a significant charitable donation to the Severn Trent Trust Fund, which is partly funded from their profits. This Trust Fund supports both customers with their water bills and additional holistic support, driving a return on investment for customers of £2.62 per £1.00 (2017/18) by providing customers access to wider support, including identification of additional benefits and other schemes.
- The company also chose to establish the dedicated Care and Assistance Team in 2015 who provide expert support to financial and service vulnerable customers. Severn Trent will be including fixing private water and waste issues for free for financially vulnerable customers and will not be increasing customer bills to fund this.
- Finally, the RSG and Water Forum noted that initiatives which help all customers also help those who are struggling to pay. The company has chosen to re-invest £100m outperformance from in AMP6 to invest in new capabilities e.g. big data, advanced analytics, robotics etc. The fruits of these initiatives drive efficiency and therefore support lowest possible bills and affordability for all. The RSG is recognises that this investment has been motivated by the company's desire to create a step change in performance for the benefit of all customers.



## Challenge 6: The company should increase the proportion of customers supported through the ‘Help to pay when you need it Performance Commitment’

The company shared their proposed 2024/25 ‘Help to pay when you need it’ Performance Commitment target of supporting 39% of customers who find bills unaffordable, against a 2019/20 forecast out-turn of 29%.

The Water Forum challenged the company to consider whether these targets were stretching enough, given that the majority of the increase was as a result of the increase in social tariff support which is customer funded.

The company was asked to consider whether the Watersure support forecasts were stretching enough given the increase in metering penetration proposals.

**Company response:** The company shared available benchmarking data on other water companies to show Watersure volumes as a proportion of metered connections and how the forecast volumes had been calculated. The RSG confirmed this addressed this specific challenge and felt the Watersure forecast volumes were stretching.

The company revised its proposal for the Performance Commitment targets, increasing its support to 43% of customers who find bills unaffordable, against a 2019/20 forecast out-turn of 30%. This would be delivered by expanding the scope of the Performance Commitment to include three additional support schemes which are funded by the company: Home Water Efficiency Checks for customers in social housing; fixing private issues for free for financially vulnerable customers; and Severn Trent Trust Fund water grants. The Water Forum confirmed that this revised proposal was stretching, especially considering the range of support and extent of support through some of the schemes. The RSG challenged whether it was appropriate to include the Severn Trent Trust Fund water grants in the scope of the Performance Commitment – see challenge 7 on the next page.



## Challenge 7: The company should consider whether it is appropriate to include the Severn Trent Trust Fund charitable donation in the scope of the Performance Commitment

The company has historically and currently provides £3.5m support for a charitable Foundation – the Severn Trent Trust Fund, which provides help and support for those with debt related issues. This includes a holistic perspective on customer debt to embrace a broad range of issues beyond just water debt. The Water Forum and RSG challenged whether it was appropriate for the company to include this in their Help to Pay When You Need It performance metric. The work done by Severn Trent Trust Fund can

be perceived to be indirect help over which the company has limited control. The company acknowledged this challenge and agreed it was not appropriate to include wider support provided by the Severn Trent Trust Fund in the scope of the Performance Commitment – for example, funding a debt advisor.

**Company response:** The company argued that there was an element of its contribution that should be included in the Performance Commitment. Severn Trent Trust Fund commits a proportion of the fund to water grants to help customers with their water bills. This appears to be a norm in the sector. The company benchmarked with other companies and identified that a number of other water companies already include their equivalent trust fund water grant schemes in the scope of their AMP6 help to pay Performance Commitments. Further validation was sought from Auriga Services who run the Trust and they confirmed support for the water grant element be included in the Performance Commitment scope.

The company has no specific commitment to continue to make the charitable donation and reviews its position on an annual basis. Donations made in the past may not be made in the future, which could jeopardise the funding for helping customers with water bills described above. The RSG was pleased to see its commitment to include the number of customers supported through Severn Trent Trust Fund water grants in the scope of the Performance Commitment, ensuring that even if no donation is made the company will continue to support the equivalent volume of customers in a different way. This is a tangible demonstration of the company's commitment to supporting customers who struggle to pay.



## Challenge 8: The company should consider whether the household voids Performance Commitment targets were challenging enough, given that it is a reward only

All Performance Commitment targets should be stretching; the RSG challenged whether this was the case for the household voids Performance Commitment, especially given that there is no Outcome Delivery Incentive (ODI) penalty. Whilst the RSG accepted the fact that all customers benefit from the company's proposed approach, it was not sure on the company's justification for the target, namely that the company needs to cover the bad debt on properties billed under target – so the target should be low.

**Company response:** The company shared further detail on how the targets were challenging and how they have set up an ODI target and an internal stretch target. While the ODI target is a reduction in voids of 841, the ODI reward structure means that the company will incur additional costs if the reduction is fewer than 13,455 properties (8% of current voids). This represents a significant and stretching target. Performance beyond the break-even point of 13,455 properties will deliver marginal gains to the company through to the stretch ambition of 45k properties, where the company benefits represent 23% (£0.5m) versus customer benefits of 77% (1.7m). This satisfied the RSG challenge.



# Vulnerability

The company initially chose to look at the issue of vulnerability alongside that of affordability.

While there are linkages, there are also clear differences and the RSG's recommendation was that they were considered and addressed separately. The company agreed with this suggestion, which was subsequently mandated in the PR19 methodology by Ofwat.

The company serves 4m households, with some 8m customers (excluding waste only customers). Its Priority Service Register (PSR) contained low numbers of customers, which did not reflect the proportion of people who could or should have been registered.

The company had 6,500 customers registered on the Priority Service Register who are sight impaired (as at end of March 2018) but the

Guide Dogs for the Blind quote that in 2017 266,900 customers were visually impaired in the Severn Trent region and, therefore, might require support (acknowledging that not all customers will need or want to be registered). Similarly, the company had 6,500 hearing-impaired customers registered, but across the UK the proportion of deaf people is 1.3% meaning that the company could have had in the region of 109,000 customers. In total, the register covered 39,000 as at the end of March 2018, with some additional customers registered separately for the nominee and/or password scheme. Inclusion on the register came predominantly via customers self-identifying or notification via third parties.

The company was aware of and concerned about the disparity in numbers on the register and those potentially in need. It was addressing this with a dedicated service helpdesk with a care and assistance team based in Shrewsbury, established in 2015. It appeared to the RSG that the issue was a combination of lack of systems and too little focus on this as a priority area within

its operations. The company is in the process of addressing its culture, to create one which put customers at the centre. Work was already underway across the company to develop a new PSR system and enter into data share agreements with other companies. The RSG, however, felt that culture was a key underpinning part of the service delivery, impacting on all customers, and explored this in detail with the company.

It was very reassuring to hear the CEO leading an engagement campaign right across the company to stress the importance of putting the customer at the heart of everything that the company did. She conducted no fewer than 65 sessions to make sure that colleagues heard the message directly and would therefore be in no doubt as to its importance. Organisational culture is an important underpinning of service delivery; however, the RSG was not tasked with providing specific commentary on this.

Through the main Water Forum and the RSG, further specific challenges arose relating to this subject area, the substantive ones are as follows:



## Challenge 1: With such a disparity between the numbers of vulnerable people across the UK and the number of customers on the priority service register, the group challenged the company to refine its categorisation of “vulnerable” customers

The company initially presented a concept of vulnerability in April 2017 of a four-category model but there was little research to evidence the validity of this approach. It was explored in an initial workshop which comprised of debt, local councillors, local housing association representatives and members of the RSG. The workshop illustrated that presenting a model in advance of a robust research programme was a flawed approach.

The Water Forum and RSG challenged the company to develop a comprehensive research programme, which was capable of answering the questions posed by the challenges that had emerged.

**Company response:** The company re-evaluated its approach and the RSG reviewed the development programme and was content with its quality and rigour. The company went on to implement a robust research programme, details of which can be found in [Appendix A1: Engaging Customers](#).

As a result of the research programme, the company amended its original four-category model to one that now represents a customer-validated approach upon which to build a service proposition. The RSG confirmed to the company that it was now satisfied with the overall programme, which was appropriately robust.



## Challenge 2: Identify the specific needs of those groups and build a tailored, targeted proposition to meet them

“Vulnerable customer” is a generic term. The RSG considered it was essential to ensure that specific characteristics of these groups were both identified and addressed in the company’s proposed service. The recommended approach was to develop a range of “personas” to bring to life the needs of these customers, from which the company could build and test a tailored service proposition. The RSG also challenged that the company should take into account the fact that some customers experience multiple vulnerabilities.

**Company response:** The “personas” shared by the company addressed this challenge and included multiple vulnerabilities. The company also mapped the “personas” to the targeted propositions to ensure all needs were met. The RSG commented that the resultant framework was in line with their expectations and best practice.



## Challenge 3: Reflect on whether and how vulnerability changes and is dependent on circumstances

The RSG felt strongly that vulnerability was not a fixed point, it could be transient or dependent on circumstances, and that the company should scope out factors which might trigger a vulnerability as this would mean the need to adapt their service.

**Company response:** The company initially responded to this by carrying out internal research. They engaged with senior management teams, operations teams and their views led to findings subsequently validated by external experts at a later workshop. Further validation came from cross matching the findings to consumer research outputs.

A number of key triggers emerged, which could necessitate a higher or different level of service to customers. In the company's list of triggers, the RSG noted that there were seven triggers, which goes beyond Ofwat's five as stated in the December PR19 Final Methodology. These additional service needs could arise as a result of an individual's changing circumstances or come

into effect when externalities occur such as sewer blockages or supply disruptions.

To further reassure the RSG that the vulnerable segment had been deeply understood, the company mapped out a number of customer journeys for each of the personas against different triggers identifying what had improved as a result of the new approach. These will be used for driving cultural change and employee engagement in the company.

The RSG was impressed with the innovation in identifying how vulnerability was a dynamic rather than a static condition. We believe vulnerable Severn Trent customers stand to receive better service as a result of this thinking.



## Challenge 3: Reflect on whether and how vulnerability changes and is dependent on circumstances

As we have noted, not all customers in vulnerable circumstances self-identify. The company engaged with 'hard-to-reach customers' to understand their needs in more depth, including how best to engage with this group of customers. We explore communication further in this chapter.

### Innovation

The company has validated our vulnerable circumstance triggers.

We've identified seven circumstances that could trigger some customers being unable to access our service or being adversely impacted:

- Vulnerable during supply interruptions.
- Vulnerable during actual or potential drinking water contamination incidents.
- Vulnerable as a result of a private and/or wastewater issue.
- Vulnerable as a result of our work in the community, for example as a result of roadworks.
- Problems in communicating or receiving information in the formats that the company usually provides.
- Needing help to read their meter, to understand their bills or make arrangements to pay their bills.
- Vulnerable to fraudulent activity, for example bogus callers.

### Innovation

One tangible example is the provision of low sodium bottled water in the case of supply disruption so customers who have babies can make up bottled formula. The company also, through its engagement with faith groups, identified those times when additional water is required for religious purposes and fed this into the operational planning processes.

The RSG felt that the company could raise awareness of this provision, not only through working in partnership with local organisations but also in drawing on wider resources, such as Mumsnet.



## Challenge 4: Look more widely to identify best practice both in identifying priority needs customers and delivering services to them

The RSG felt that customers have wide ranging experience of engaging with, and expectations of, companies who put service values and trust at the heart of their offering. The company's customer expectations were potentially calibrated to match best practice they experienced elsewhere.

Nonetheless, the RSG felt that the company could benefit from identifying those organisations who have a good reputation for customer service, seek to understand what best practice looks like and what lessons could be learnt. The company identified a number of exemplars who would be willing to share their knowledge and practices.

The list of companies who participated in the best practice research/benchmarking included:

- Councils  
Adult Services,  
Emergency Planning  
Teams, Feeding poverty  
partnership areas,  
Social care
- BBC
- Sky
- First Utility
- Cadent
- Western Power  
Distribution
- British Red Cross
- Police
- Fire Service
- St Johns Ambulance
- Housing Associations
- Step Change
- Dementia Friends
- Shelter
- Coventry Deaf Charity
- Guide Dogs  
for the Blind
- Hereward College –  
learning difficulties
- The Institute of  
Customer Service

The above list enabled the company to identify potential partnerships for the future, understand best practice for driving cultural change and identify gaps in propositions and test proposals. The RSG is impressed that the company is taking an 'outside-in' perspective on what good service will be required to meet these higher expectations.

While these organisations can provide general learnings for the company, the RSG accepted that water companies have some different and unique constraints that they share with other utilities. The company is exploring the possibility of data sharing with companies in the energy sector as there is some similarity of business model and customer base. For a number of reasons, including system capability, this work is ongoing but the RSG is confident that sharing opportunities will emerge.

## Innovation

The company is investigating a trial programme with Western Power Distribution to identify and fulfil the needs of customers in vulnerable circumstances across the region.



## Challenge 5: Consider and identify suitable partners who could support their work and better connect with vulnerable customers either individually or collectively

While the company communicates with all its customers through the billing process, the RSG felt that more was needed to engage vulnerable sections of society. It was felt that developing and working in partnership with community and other organisations would be of benefit, particularly in connecting with those who don't perceive themselves as having a vulnerability or who are reluctant to self-identify.

**Company response:** Through the research and engagement programme the company has forged links with a new range of civil and religious organisations.

The company's activities cover a wide geographical area and, given the large number of possible organisations with which the company could engage, the company invited specific suggestions from the Water Forum and acknowledged that it could do more to engage with umbrella or strategic organisations who could support their activities and spread awareness. The programme of activities include engagement with housing associations, health visitors, the Police and the Fire Brigade.

There was also acknowledgement that investment in services such as data collection and improved interrogation of existing systems would help the company better deliver tailored services to

customers in vulnerable circumstances. Through its research the company also explored how willing customers in vulnerable circumstances were to have their data shared with third-party organisations.

### Innovation

Through their connection with a Polish community, they have been offered the opportunity to engage with new migrants to help them understand 'how water works' in England and what services and support are available. This is intended to prevent this group of customers from becoming vulnerable. Further, engagement with the d/Deaf community has resulted in the offer to have video signed messages for supply interruption incidents.



## Challenge 6: Consider including a second vulnerability Performance Commitment focussed on supporting transient vulnerable customers

The Water Forum recognised that transient vulnerable customers are most impacted during water supply incidents and asked the company to consider whether they should introduce an additional Performance Commitment to both identify and support these customers.

**Company response:** The company agreed that this group of customers are important to support and had already included in its proposals activity to identify transient vulnerable customers through promotion of support available and opening of additional priority channels during an incident. The company has also included two dedicated vulnerable need codes on its Priority Service Register to enable them to easily record this groups needs and provide support.

The company reviewed options of developing an additional Performance Commitment but found that to truly support this group of customers it would need to include both the identification and provision of support in the scope.

As compound measures are not allowed by Ofwat this would therefore require two additional Performance Commitments to be set up. With this challenge coming late on in the process, the company felt there was a risk that there could potentially be unintended consequences from the Performance Commitments with only limited time to develop proposals. The company therefore propose to develop measurement proposals during AMP7, working with CCWater, and set up as shadow measures.



# Communicating with customers

In many of the research projects, conducted on a range of different issues, the customer request for more communication from Severn Trent was noticeably consistent.

The Water Forum recognises that the Ofwat Aide Memoire does not ask for comments on communication and we have been reluctant to stray from our brief. However, given the strength of customer feeling, we felt it would be an omission not to reflect customer views.

It isn't that customers are unhappy with the communication they receive today. Interestingly, the motive for wanting to hear more was to learn more; customers were curious and wanted to understand more about the provision of their water. In co-creation sessions or deliberative workshops, they expressed surprise at the extent

of the company's activity and concern about the long-term resilience of water for us all. They wanted to learn more.

**Company response:** This issue has been raised in the Water Forum and the Chair has discussed the customer appetite for information with the Board. The company is carefully considering the findings and particularly how to respond in a cost-effective manner. One example of this is the focus on future generations.

Whilst more communication may be a generally held request from customers, the RSG and Water Forum felt that the area of customer communication should be a particular focus for customers who were struggling with affordability or who were vulnerable. Improved communication was needed to address the weakness of the limited number of people on the priority service register and raise awareness of the support that was available for those customers struggling to pay. The RSG felt that the company could take a co-creation approach to its research programme in this area to engage customers and gain their trust.

## Innovation

In addition to current customers, the company undertook research to identify what future customers might want. As a result of this, it has developed a programme of educational outreach to engage with children and young people. Integral to this is a bus that will visit schools across the region, featuring interactive learning material, showing the "journey of water" and delivering water-saving messages. The Water Forum was impressed with this initiative and commended the company for investing in a programme that embodied its commitment to engaging and educating customers of the future.

This section looks at the communication challenges which relate to general service provision, vulnerability and affordability.

**The substantive challenges posed during the process were as follows:**



## Challenge 1: Develop an appropriate communication plan to raise awareness of the Priority Service Register and respond to their needs

One of the first challenges to communication is to be respectful and accurate in describing the audience.

**Company response:** The company has amended its terminology and now uses the term customers in vulnerable circumstances (CIVIC) rather than vulnerable customers. This reflects the fact that both personal and external circumstances, such as flooding, supply interruptions etc. can lead to, or exacerbate, vulnerabilities in customers. The company tested out the language and categories both with customers and experts to ensure that it was acceptable and appropriate. This was explored in the expert vulnerable customer co-creation sessions. For example, it resulted in the use of the term d/Deafness which is how the deaf community choose to describe themselves.

The RSG has stressed the importance of continuous improvement and is pleased to note that the new customers in vulnerable circumstance list includes an internal review provision to ensure it remains relevant.

A further suggestion, put forward early in the process, was that customers either did not view themselves as vulnerable or saw the Priority Service Register (PSR) as not being relevant to them and their circumstances. While this hypothesis was not tested fully, it was discussed with customers in focus-group sessions. Therefore, the RSG felt that this was a reasonable assumption.

The company has committed to developing a communication and engagement plan to raise awareness of the PSR using a range of different media, tailored for specific vulnerabilities such as infographics, British Sign Language videos, etc. The company aims to take any stigma out of the messaging by educating about transient vulnerabilities and defining vulnerabilities more widely than they had previously. The company will be promoting support available through its day-to-day engagement with customers and utilising third parties such as the NHS, charities, Local Resilience Forums and other umbrella organisations



## Challenge 2: Ensure customers are appropriately engaged and informed during interruptions to supply or in other circumstances that may trigger an issue for customers in vulnerable circumstances

While interruptions to supply are intermittent and not part of the everyday activities of the company, the RSG wanted to ensure that customers in vulnerable circumstances were identified and their issues addressed at what can be a difficult time. While this was not a specific requirement of PR19, the RSG felt that it was relevant in relation to the low number of customers in vulnerable circumstances on the PSR.

**Company response:** As an example of the company's response, through its research with different groups, the company has engaged positively with the d/Deaf community and has introduced a range of sign language videos which can be uploaded when needed. The videos can be seen in [Appendix A1: Engaging Customers](#).

As part of the co-creation research programme, the company explored triggers that might result in the need to adapt communication channels or approaches for customers in vulnerable circumstances. This research resulted in an addition to its existing support. A matrix matched different types of vulnerability with the help they might need so tailoring support that will be available for physically vulnerable customers.

This tailored approach in communication represents a step change in the way the company supports customers. The RSG acknowledged that the company has embarked on its cultural change to ready itself for 2020 and accepted a phased roll out managed through appropriate internal targets. However, the RSG challenged the company to maintain the momentum – there was still a long way to go.

## Innovation

Tailored communication – the company will send an SMS or landline recorded message according to the customer preference (different wording to the broader customer base and prioritised to customers in vulnerable circumstances) registered on the PSR for this service

Water quality notices – the company will look to send alternative print (e.g. Braille, large print) to those on our register who opt for it.

Nominee contact – a customer can register a nominee they would like the company to either send an SMS or landline recorded message to if there is an incident affecting the customer on the PSR.



## Challenge 3: Raise awareness of social tariff/support customers with affordability issues

The company carried out research work with general customers, struggling-to-pay customers and debt experts to understand what customers wanted in terms of communication when they were experiencing financial or affordability issues.

**Company response:** The company's response and service proposals relating to these customers can be found in [challenge 4](#) on Affordability.

## Challenge 4: Engage customers generally to understand what communication they want from the company

The research programme identified that customers are generally happy with the level of engagement they receive, and that the brand should remain a functional one with a range of appropriate channels which are accessible to current customers, but also accommodates channels that new customers might prefer. The RSG challenged the company to understand further what customers specifically wanted communication about and in what form.

**Company response:** The company responded to this challenge through its co-creation workshops (more information on this programme can be found in the [business plan](#)).

The company has identified five customer communication principles which are:

- Keep customers informed.
- Don't overpromise, be realistic.
- Ensure customers know about the resources available to them.
- Have a clear system in place for when an issues arises.
- Show you care.

These principles have been implemented as follows:

- Target communication effectively.
- Ensure that the existing touchpoints with customers are maximised.
- Ensure communication is relevant.
- Use partners to amplify and spread their message.
- Talk in the customers' language.

These principles are applicable to general customers as well as those who are vulnerable or who are struggling to pay.



# Assurance

Having interviewed the sub group lead, the Peer Review team is confident that the challenge process has been robust and maintained independence from the company, despite the need for a close working relationship between the two.

The positive impact of the challenges put forward by this sub group are strongly linked to the work of the Customer Engagement Group and manifest themselves in the company's greater understanding of its customers and how their needs may change over time. That the challenges have developed over time as proposals have developed and that not all of the challenges logged by the sub group have been taken on board by the company again demonstrates that the relationship between the two bodies has retained a level of professional independence.



# The Water Forum's concluding views

waterforum

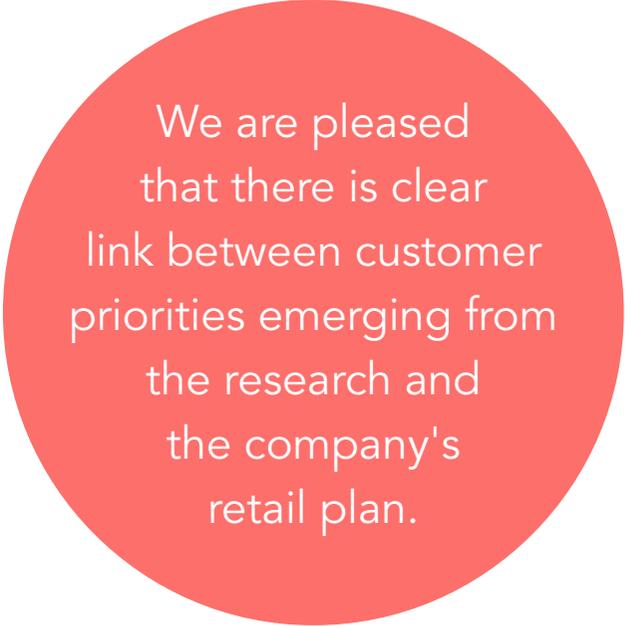
As we have noted, the Retail proposition is critical for customers in that, for most, it will be their only contact with the company.

We recognise from our research findings that customers extrapolate from their personal experience to infer the company's values and anticipate how they will respond in non-retail situations. The quality of the retail proposition is important for all customers but the RSG has particularly challenged the company to explore customer needs in terms of the affordability and the vulnerable circumstances that customers might face. These challenges and ideas to address them have been shared with the complete Water Forum at every meeting.

We are pleased to recognise the effort the company has put into deepening its understanding and developing proposals to meet customer needs. As we have summarised on the right, we can see a clear link between the issues addressed in the plan and the research project which has informed the business decision.

Listening to customers surfaced an additional issue that customers want to learn more and so be communicated with more effectively by the company. The company is actively considering the proportionate approach to this but we are pleased to note their first omni-channel advertising during the summer heatwave; we understand initial customer reaction is positive.

The research quality has been such that we have a triangulated perspective on the needs of customers. We believe the company's response represents a strong service offering with points of real innovation that are comparable to service delivery in other sectors.



We are pleased that there is clear link between customer priorities emerging from the research and the company's retail plan.



# Investments

The business plan contains a number of strategic investments in the company's assets. This chapter describes the challenges we made to both the need for the investments, the alternative options and the benefits to the customer that will result from the improvements to infrastructure.

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# Introduction – The Investment Sub Group (ISG)

waterforum



## Rish Chandarana

Sub Group Lead

[Click to view profile](#)

From the outset, the Water Forum recognised the importance of scrutinising the company's plan for investment in AMP7.

In particular, the extent to which investments would command the support of customers was critical. It established an Investment Sub Group (ISG), including members with relevant expertise, to engage with the company in depth on these issues, enabling the wider Water Forum to focus its consideration of proposed investments on the most significant issues.

The Ofwat methodology for PR19 offers Water companies the facility to make a case for additional income, beyond that which they will be allowed to raise from the modelled costs of an efficient company. The terminology relating to these cases for investment can be confusing and has been subject to further guidance (Ofwat IN 18/11). This guidance distinguishes between two categories of case for exceptional investment.

**Cost Adjustment Claims** are those that relate to “unique and material costs that are unlikely to be captured by Ofwat’s cost baselines”.

**Enhancement Expenditure** claims relate to “expenditure for the purpose of enhancing the capacity or quality of service beyond current levels”.



Ofwat required companies to submit details of any proposed Cost Adjustment Claims by 3rd May 2018. In practice the company prepared and submitted proposals for both Cost Adjustment Claims and Enhanced Expenditure at this time as they, and the Water Forum, found it to be difficult to separate the two.

The ISG was established in January 2017 and met regularly to scrutinise these proposals and challenge the company on many aspects. A comprehensive [challenge log](#) and company response was maintained.

**In this chapter the term Cost Adjustment is used to encompass both types of claim for exceptional investment as this was the contemporary term used in our discussions and in our challenge logs.**

This chapter will show how customer views on the key proposals were captured and evaluated. It will also highlight some of the key challenges that the ISG raised in order to help shape the programme. All of the evidence supplied in this chapter will ultimately demonstrate how the ISG was assured on the extent of customer support for each cost adjustment.

The company submitted its draft Cost Adjustments to Ofwat at the beginning of May 2018. The company subsequently reviewed the proposed cost adjustments relating to Water supply and Demand and Wastewater to reflect how uncertainty with regard to the delivery can be better managed and thereby avoid customers paying for investments that may not be required.

This matter is dealt with in the [Customer Protection](#) section of this chapter.



# Scope and focus of Water Forum challenge

## Ofwat's PR19 Methodology asked the Water Forum to demonstrate the following:

- Where appropriate, is there evidence – assured by the Water Forum – that customers support the project?
- Does the proposal deliver outcomes that reflect customers' priorities, identified through customer engagement? Is there Water Forum assurance that the company has engaged with customers on the project and this engagement been taken account of?
- Is there persuasive evidence that the proposed solution represents the best value for customers in the long term, including evidence from customer engagement?

The Water Forum and ISG ensured that each proposed Cost Adjustment was subjected to detailed scrutiny. The customer was always at the heart of discussions and decisions. The Ofwat Aide Memoire was used as a checklist to ensure that customer priorities were reflected in each Cost Adjustment proposal and that there was persuasive evidence that the proposed solutions represent the best value for customers in the long term.

The Water Forum and ISG debated with the company the question of the appropriate scrutiny of baseline investment. The work on Customer Engagement indicated the priority given by customers to investment in the maintenance of assets, and baseline investment will compromise a very high proportion of capital expenditure. The Cost Adjustment proposals needed to be considered in the context of proposed baseline investment in the relevant area of activity.

On the other hand, baseline investment is dynamic, reflecting in real time outputs from asset deterioration modelling and operational considerations and opportunities. Ofwat's approach will lead to an agreed quantum of baseline expenditure which the company will manage throughout the AMP. And the Aide Memoire does not show an explicit expectation that a Customer Challenge Group (CCG) will comment on this aspect of the business plan.

Following this debate, we agreed with the company that the focus of the work of the ISG would be on Cost Adjustment proposals, but that there would be an ongoing dialogue throughout the AMP, in which Water Forum members would play an active role.



# How the ISG exercised its remit

The ISG was conscious that the business case for each proposed investment was complex and required in-depth technical undertaking.

Some members of the sub group had extensive technical knowledge helping to ensure that the ISG was able to effectively scrutinise the approach and methodology adopted by the company in reaching key conclusions.

Severn Trent operates across a significant portion of the UK, serving almost eight million people (household and non-household). Consequently, the circumstances specific to the environment and how this links with aspects of supply and demand of water required significant familiarisation. Before any specific proposals were considered, the ISG improved its knowledge and understanding of the key issues facing the company over the current investment period. This included detailed presentations and discussions on matters such as Water Supply, Leakage Reduction, Metering, Resilience, Water Framework Directive and Security.

Through monthly ISG meetings and by maintaining a comprehensive ISG challenge log, the ISG ensured that as relevant challenges were raised they were subsequently addressed.

The challenges outstanding were reviewed and prioritised to ensure that the company maintained focus on addressing the most important issues to the ISG and ultimately the customer. Furthermore, an overall status table was presented each month to show against each Cost Adjustment the extent to which the company had demonstrated the **Need**, whether the investment was the **Best Option for Customers** and how **Customer Protection** is ensured.

In addition to scheduled ISG meetings, in order to satisfy ourselves that the customer research approached was successful in engaging customers meaningfully, members of the ISG and the larger Water Forum attended a number of customer deliberative research events and company stakeholder forums associated with the dWRMP (February 2018).



# How the company listened

The company has a comprehensive and robust research programme, which informed our deliberations.

Details of this programme can be found in the [Appendix A1: Engaging Customers](#). A number of the members of the Water Forum were involved in both the Customer Engagement Group (CEG) and ISG. This ensured that there was strong collaboration between the two groups.

It enabled the ISG to contribute to the research programme and ultimately to validate the best option for customers. This is a good example of how the work made by each sub group interlinked in order to provide rigorous and robust challenge to the company.

Each cost adjustment was supported by relevant research. This will be referred to later on in this chapter.

Strategic investment	PR14 customer research	Deliberative research	Customer tracker	Social media scraping	Complaints analysis	Choices research	Willingness to Pay research
Water Supply Resilience	✓	✓				✓	✓
Water Supply Demand		✓	✓	✓	✓		
WFD & UWWTD – Wastewater Treatment Works & Combined Sewer Overflows		✓	✓	✓			✓
Security		✓					



# The Water Forum's challenge of Severn Trent's approach

The company's proposals for submitting Cost Adjustments developed over the course of our interactions through the ISG.

In undertaking its work, the ISG influenced the way in which the company presented and undertook the development of its plan. Some of the key areas of influence are outlined below.

The very first question the ISG considered was whether Cost Adjustment proposals were in response to real customer need and this work was underpinned by the work undertaken by the CEG. In this way, the ISG was able to establish real need and evaluate the company's response to that need.

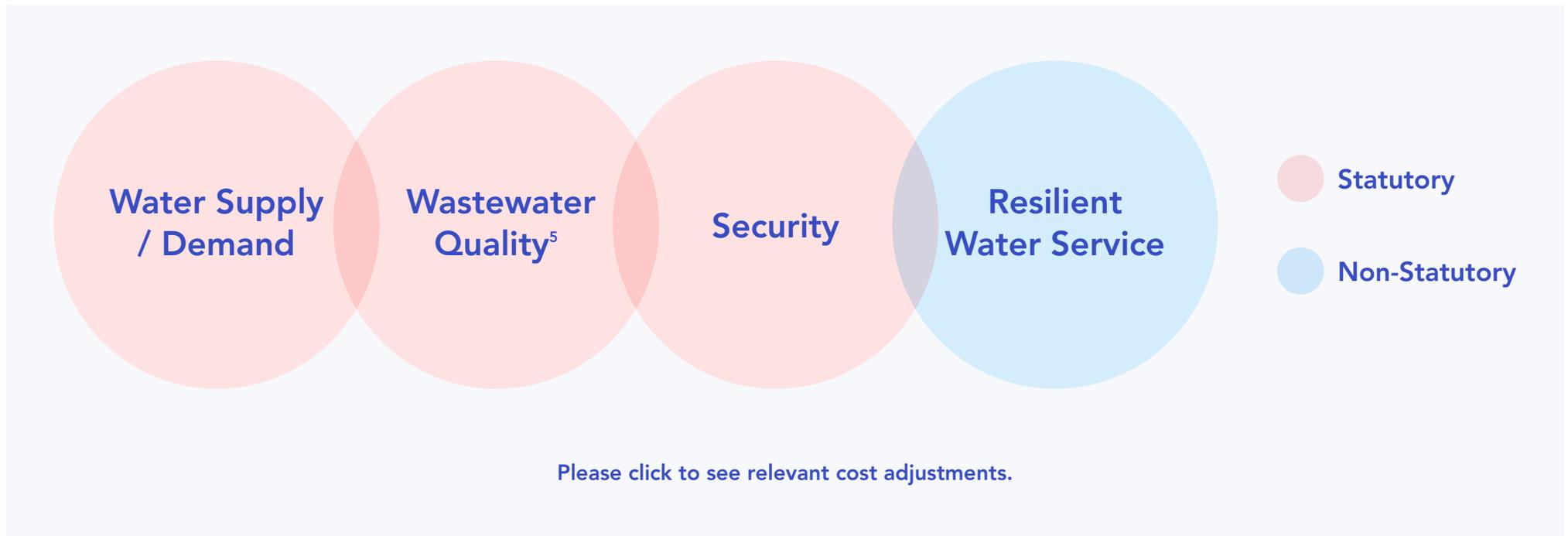
The ISG challenged the company to refine and present clearly the specific schemes of investments being proposed. Initially the company presented a large list of schemes, with a heavy emphasis on the complex and technical information underpinning the proposals. The Water Forum and ISG successfully challenged the company, resulting in significantly improved clarity of the need for and nature of proposed investments. Inevitably, this enhanced the quality of discussion thereafter.

Within the overall suite of proposals, some were labelled as Statutory Cost Adjustments, for which the company argued that there were underlying legislative or regulatory drivers influencing the requirement for investments. The ISG challenged the company to explain the extent of customer choice in these Cost Adjustments and also the extent to which these are deemed statutory or mandatory (i.e. non-discretionary), making the point that customers had a legitimate interest in how these schemes might be implemented, even if statute or regulation required action to be taken.

The major challenges provided by the ISG fall into three main categories set out below:

- 1 Customer engagement challenges**  
Challenges on the quality and focus of **customer engagement**.
- 2 Process challenges**  
Challenge around the **process** followed by the company to ensure that these were aligned with outcomes.
- 3 Impact challenges**  
Challenges around the **impact** (customer, environment etc.) of the business plan proposals.

## Cost Adjustments in the Severn Trent Plan



<sup>5</sup>Including adjustments associated with regulations such as the Water Framework Directive (WFD) and Urban Waste Water Treatment Directive (UWWTD) and Combined Sewer Overflow.

# Water Supply and Demand

The expectations of the company of balancing Supply and Demand over the next 25 to 50 years are of a significantly higher order than has been the case in previous planning periods. This is driven by a number of factors including:

- Reductions in supply arising from the legacy of unsustainable abstractions (e.g. Restoring Sustainable Abstraction).
- The need to comply with Water Framework Directive ensuring waterbodies meet good ecological status (GES) and that there no deterioration of the status of all waterbodies.
- The impact of increasing population and climate change.

The ISG reviewed the challenges the company was facing in developing its draft Water Resource Management Plan (dWRMP), concluding that in order to solve a complex balance of supply and demand options, multiple trade-offs and decision processes were needed each, with complex implications across the short and long term. In seeking assurance that customer needs

were appropriately considered, the ISG critically assessed the methodology and approach to these complex trade-off and decision processes from the perspective of the customer.

The company undertook a stepwise process involving initial screening of investments – a wide array of potential supply / demand options; testing of options against real-world scenarios using quantitative modelling tools, and a cost-optimisation process to balance least-cost options alongside those which offered additional benefit at an incremental cost. The ISG was able to scrutinise this approach and satisfy itself that the process was robust.

Deliberative customer research highlighted the importance to customers of leakage management in balancing supply and demand constraints. As part of the ISG evaluation of the company leakage reduction forecasts of **15%**, the ISG was presented with the modelling tools used in identifying the target percentile reduction in leakage. As a result, the accuracy of the tool as a basis for underpinning the **15%** leakage target appeared reasonable.

Detailed modelling was undertaken by the company in respect of climate change scenarios. It spent a significant amount of time explaining its methodology and approach, arranging for its climate expert to provide this update to the ISG.

The topic of demand management through schemes such as behavioural modification and metering were also presented. The ISG debated and reached a common viewpoint with the company on the extent to which education could act as a means of demand management and utilised the experience of ISG members to conclude that the outcomes expected from demand management initiatives appeared reasonable. Several detailed discussions were also held in respect of metering and the extent that this could influence customer behaviours over the short and medium term.

Outlined on the following pages are examples of the challenges raised by the ISG together with the responses by the company.

# 1 Customer engagement challenges

Water Forum Challenge	Company response
<p>The ISG challenged the company to seek customers' views on the supply and demand options and evidence this. Also, to ensure that customers are clear about the difference between statutory and non-statutory duties.</p>	<p>The company commissioned deliberative research and in-depth, one-to-one interviews on supply demand. It has triangulated the findings from the wider insight programme. During the deliberative research it explained in detail the challenges and options that are available. These included metering, water efficiency, leakage reduction, imports (from other water companies), new abstractions, expanding reservoirs and re-using effluent. Customers favoured demand management options ahead of new supply options but acknowledged that both would be necessary given the scale of the challenge. The company made it clear where it had a statutory responsibility to comply with any challenge and where the need to address challenges were non-statutory (and therefore optional).</p>
<p>The ISG challenged the company to ensure that the proposals for water trading, even if cost neutral, should be subject to customer engagement.</p>	<p>As part of the deliberative research, the company presented options to customers that included trading (imports and exports) with other companies. Customers were initially sceptical of this as a long term solution. After a 'deep dive' into the issue, it was noted that they favoured more local solutions (as opposed to transfers). The company has also commissioned joint research with Thames Water and United Utilities to look at the feasibility to trade water across company boundaries.</p>
<p>The ISG challenged the company to ensure that customer statements supporting Cost Adjustments should be evidenced to specific research. This would provide a line of sight and provide 'weight'.</p>	<p>Each business case (for the Cost Adjustment Claim or Enhancement) now contains an appendix that shows the Line of Sight between the various sources of customer research and the actions the company has taken to respond to customer views. Additionally, it has considered the relative weighting of each finding. This is based on whether multiple sources of evidence converge on the same finding or whether there are contradictory views, on the type of research and how tailored it was to the specific question.</p>

## 2 Process challenges

Given the importance of statutory and regulatory drivers as a pre-cursor to the business plan along with the inter-dependencies of the business plan to the customer research as an example, here are a selection of the challenges raised by the ISG relating to process:

ISG Challenge	Company response
<p>The ISG challenged the company on the process / timeline for developing the dWRMP allows time to unpick any key model assumptions if challenged.</p>	<p>Following a session provided by the company to Dr Steven Wade (ISG expert on climate change), it was noted that the company was following a robust process. Subsequent to this review, the company continued to refine its modelling based on latest thinking. One key refinement was the approach to accommodating the uncertainty associated with climate change. An option has been developed to identify schemes associated with coping with the impacts of Climate Change Uncertainty. This would allow the company to carefully monitor the need for these schemes in future as more uncertainty gets resolved. Each model run clearly showed the constraints and assumptions that were present so it was easy to isolate them at a later date if the need existed. Constraints and assumptions included rate of leakage reduction, levels of meter penetration, impact of environmental improvements (such as WFD), loss of abstraction rights (through RSA), new capacity available through new schemes (presented in Feb 2018).</p>
<p>The company was challenged to demonstrate whether there is overlap with the optimised set of solutions to address water resources (statutory) and the set of solutions to address water supply resilience (non-statutory) and ensure there is no conflation of costs.</p>	<p>The company has continually checked the list of optimised solutions from its statutory (i.e. dWRMP) programme and compared that with the list of preferred solutions from its non-statutory (i.e. Resilience) programme. Any overlaps/duplications were removed to avoid over scaling programmes (e.g. North Notts and Little Eaton). To avoid conflation of costs, Ofwat reporting guidelines provide clear advice on how to deal with solutions that deliver multiple benefits. The company complies with this guidance.</p>
<p>The ISG challenged the company to demonstrate, in relation to the Supply Demand Balance investment model (WISDM and DMU), if it can pull out why decisions were made and help the ISG understand how the least-cost option has been built.</p>	<p>The models provided amongst other things the least cost options given the constraints the company set and assumptions it made (climate change, leakage reduction, meterage penetration, environmental improvements, restrictions on abstractions etc.). These constraints were clear. The company can demonstrate why schemes have been chosen. It is important to realise that the model aids decision making in an uncertain future – it does not give 100% confidence in an uncertain world, but it helps the company make ‘least regrets/low regrets’ decisions.</p>

### 3 Impact challenges

The ISG considered in detail the company’s key assumptions on the proposed interventions to meet the supply / demand challenges, namely leakage, metering and water efficiency and, importantly, whether the proposed solutions are supported by the emerging findings of customer research. Key challenges related to impact included:

ISG Challenge	Company response
<p>The ISG challenged the company to show how much each of the strategies (leakage reduction, metering and water efficiency) deliver in terms of Ml/d per £ invested. How reliable are the estimates of impact and what is the approximate bill delta for each of the strategies?</p>	<p>The company provided some generic guidance on how much each investment would impact the bill (for budgeting purposes) – estimated to be c£1 bill increase for every £100M new capital investment. Bill impact depends on depreciation rates of assets built and the operational (cost) impact of the solution proposed as well as capital cost. Estimates for each proposed investment have been provided together with bill impacts (April 18 and May 18). Cost per MLD of the various Supply Demand Balance interventions were provided in detail in May 18. The company continuously refined its project estimates and finalised them by mid-May.</p>
<p>The ISG challenged the company to reconsider its original statement relating to leakage proposals, ‘We can go beyond that but we start to become cost – ineffective. We do not believe that is in the best interests of customers’. While this may be possibly correct, it does not sit well with customers who want you to go beyond this.</p>	<p>Customers have shown through the deliberative research, Choices Research, WTP survey and Quarterly Tracker, that tackling leakage is a top priority and an emotive issue for customers. The company plan contains its most ambitious leakage target it has ever proposed (15%). The company had no clear evidence that customers wanted it to go beyond cost effective. The research revealed how customers appraise best value and it suggested they want solution effectiveness and cost effectiveness for the long term. No evidence showed that customers wanted the company to go beyond what is cost effective (in the long term). The company’s extensive liaison on its dWRMP showed support for its leakage ambition. It has set out its longer term plan (to 2045) which continues to drive leakage down further whilst maintaining cost effectiveness.</p>

ISG Challenge	Company response
<p>The ISG challenged the company to demonstrate how much time it takes to commission new sources of water from agreement in principle (the work plan) to production of water.</p>	<p>The company used examples from other AMPs that indicated up to eight years to develop new groundwater sources (to secure new licences, drill and test boreholes, design and build water treatment production plants). Whilst construction of new surface water works are much rarer, the company is confident it can be done faster than groundwater sites where the uncertainty on water quality and water volume is much higher.</p>
<p>The ISG challenged the company to provide its view on what could happen to customer trust when an enhanced metering programme is implemented.</p>	<p>The company used deliberative research to deep dive into metering to fully explain the impacts that included the likely benefits, concerns, tariffs and potential behaviour change. The research findings revealed that customer support for increased metering was overwhelmingly positive, there were a number of myths that needed to be dispelled. To help the company understand how it could best implement this initiative, it conversed with other water companies that had gone further with metering as well as running a co-creation workshop with customers. The company has used this learning to develop its implementation plan, communications and messaging to ensure it developed the right relationships and maintain trust with its customers.</p>

Cost Adjustment Overview  
**Water Supply and Demand**

**Conclusion**

Unprecedented challenges are being faced by the company to balance supply and demand given regulatory drivers. There is a need for investment to ensure security of supply and, as identified in the customer research work, customers recognise investment is required.

The company has considered a range of options and undertaken robust cost-benefit analysis before concluding on the most appropriate option choice. Customer engagement has been sought in respect of the choice of supply/demand solutions on offer. As well as its own scrutiny, the ISG has been given access to the results of the assurance process commissioned by the company, which includes independent expert scrutiny of the models used and the estimates of cost.

The risk of water shortages, particularly those arising from climate change have been carefully considered. Since the submission of the Cost Adjustment proposals in May 2018, the company has had the benefit of comments on its dWRMP proposals from a number of sources, including EA and Ofwat, and has also seen the approach to common issues proposed by other water companies. Its consideration of this additional information has led to revisions to the plans, including a proposed new approach to creating a dynamic portfolio that can respond quickly to new relevant evidence, whilst protecting customers from paying for interventions that might prove to have been unnecessary.

Given the importance of an optimal suite of interventions to deliver supply/demand balance, the ISG has sought further refinements of the estimates. The refinements have reflected the potential impact and the comparative cost effectiveness of the wide range of possible interventions.

The company has used the Average Incremental Cost (AIC) to calculate the relative contribution of its selective programme.

This is show in the table below:

Relative contribution and AICs for our selected programme AMP7 MI/d	AIC (p/m <sup>3</sup> )	AISC (p/m <sup>3</sup> )
Supply schemes	141	13-74
Leakage	67	79-98
Metering	10	377
Water efficiency	3	378

# Wastewater Quality including Combined Sewer Overflows (CSOs)

Wastewater quality requirements are underpinned by the need to comply with the Urban Wastewater Treatment Directive (UWWTD) and the Water Framework Directive (WFD), which ultimately seek to ensure that good ecological status is achieved on all waterbodies (such as rivers, lakes and groundwaters) by 2027.

One of the key challenges associated with meeting the 2027 target is that, for most individual waterbodies, confidence in the need for the scheme will improve with further technical work on potential solutions. The plan will also need to accommodate River Basin Plans which are due to be approved by Government in 2021.

The company has developed a programme of work in response to the Environment Agency and Natural England's guidance in the Water Industry Strategic Environmental Requirements (WISER). This document and its associated guidance sets out the improvements required to the company's wastewater assets. The assets covered by the programme are identified in the Water Industry National Environment Programme (WINEP), which was developed in a staged approach and shared with the company to support the development of its business plan. The company has confirmed to the Water Forum its commitment to delivering all the schemes in WINEP by 2025.

In order to provide the ISG with further context around this requirement and the current status of their knowledge of waterbodies, several discussions were held with the company and walk-through examples were provided.

Opportunities arise to secure best value for customers in meeting these requirements by careful management of the timing and sequencing of these investments, alongside other work that is planned. For example, there are synergies between these proposals and work on the same area of network arising from baseline investment, projects arising from other Cost Adjustment proposals, or work partners are looking to undertake. The ISG was reassured that the company is alive to these opportunities.

## Cost Adjustment Overview

## Wastewater Quality including Combined Sewer Overflows (CSOs)

We were shown by the company a list of the key waterbodies that they would see as a priority for further evaluation and a timeline for which future waterbody improvements would be made through to 2027.

Combined Sewer Overflows (CSOs) are an important element of infrastructure in a sewer network releasing sewage into waterbodies during periods of higher levels of rain intensity and duration.

The company faces ecological challenges to manage the impact of CSOs as part of the UWWTD and WFD requirements set out earlier, whilst at the same time being faced with greater urbanisation and development.

One way in which the company expects to deliver improvement is through improvement schemes associated with CSOs. The company identified 62 CSOs with the potential to impact on the environment. Strong evidence supports 17 CSOs to be addressed in AMP7. The company has evaluated the solutions available from improvement of the source (e.g. through sustainable drainage solutions) through to storage to defer or treatment to improve outflows from CSOs. The ISG consider that careful options appraisal has been undertaken for each scheme and a detailed assessment has been undertaken of sustainable drainage solutions.

In addition to delivering these specific schemes, the company recognises the need to improve the monitoring of the network which it intends to do e.g. through the greater use of data loggers, to establish if further action is needed during AMP8.

The ISG challenged the company on the risk that a significant number of CSOs would need to be addressed in AMP8. The company assured the ISG through provision of evidence relating to historic programmes, that it is likely that a relatively small number of CSOs will need to be addressed in AMP8.

# 1 Customer engagement challenges

Water Forum Challenge	Company response
<p>The ISG challenged the company to consider how the company could demonstrate to customers how much should be invested in the environment, particularly if going beyond the statutory? Also, how it would manage customer feedback and choices around statutory and on statutory requirements?</p>	<p>The research demonstrated that customers support the company’s environmental improvement programme. They were also in support of proposals to work with partners to solve (environmental) problems. This offered the opportunity to go beyond statutory obligations at relatively low cost. Customers also told the company to be mindful of costs to manage bills. The company will therefore implement a mechanism to assess benefits and costs which seeks to appraise more than traditional benefits (e.g. minimum statutory compliance for lowest TOTEX), to include wider environmental benefits, subject to overall affordability. It has sought customer views on how it should respond to statutory obligations and non-statutory proposals. These views have been factored into proposals as described in each business case. Areas where customers were offered/expressed choices included pace of investment, hierarchy of solution options, solution preferences and going beyond statutory obligations</p>
<p>The ISG challenged the company to say what it does for the environment in external communications.</p>	<p>The company’s environmental values and activities are a core component of its communication plans across four different communication programmes:</p> <ol style="list-style-type: none"> <li>1. The company is developing a new and more immersive educational programme for PR19 that targets primary school children and will aim to inspire the next generation of water users. It will show children where their water comes from and how wastewater is treated along with the impact of both activities on the environment.</li> <li>2. The company’s impact on the environment is also a key feature of its customer communication plans underpinning the new brand proposition ‘Wonderful on Tap’, with campaigns already incorporating messaging about the improvements we make to the environment.</li> <li>3. The company’s operational communication plans – i.e. those that accompany specific capital schemes also inform the local population of environmental benefits.</li> <li>4. The broader corporate communications such as Annual Reports, Industry presentations and trade, local and national press releases convey the company’s environmental credentials, performance and impact.</li> </ol>

## 2 Process challenges

ISG Challenge	Company response
<p>The ISG asked the company to show that their developing business plan meets the challenge laid out in WISER.</p>	<p>The company has shared its assessment (line-by-line response) with the EA and has incorporated the main elements into the plan. The EA Water Forum member acknowledged the comprehensive response of the company. The company is confident that it will meet the challenges set out in WISER.</p>
<p>Both the Water Forum and ISG challenged the company to explore opportunities to be able to evidence the benefits of sustainable integrated environmental planning, considering financial, environmental, legal and societal costs and benefits.</p>	<p>The company will adopt a more integrated catchment approach in AMP7 by reviewing how it can best identify and utilise all opportunities. These include, bringing together the work covered by the following initiatives that the company already operates such as Farming for Water protocol and working with third parties on a Catchment Based Approach (CaBA). The company is currently mapping all WINEP outcomes across the catchment to understand the catchment level position and will map this to CaBA and Farming for Water to understand if greater benefits can be delivered by considering the strategic position. The company accepts that benefit assessments associated with investments need to be more holistic. Therefore, it is developing how to appraise the natural and social impact of its investments. It has engaged specialists in this area to support it and has trialled the approach developed by Water UK, also used the EA's cost benefit model.</p>
<p>The ISG challenged the company to ensure that the assurance process would address and reflect the challenges it had raised as well as those from the main Water Forum. Further to this, evidence how the process supports and informs/involves customers so that it is transparent.</p>	<p>The company has shared its detailed assurance process with the Water Forum and ISG, which provides board-level assurance. The process will give the Board confidence that the plan meets the requirements of Ofwat's PR19 cost adjustment guidelines. The company is considering how this might be shared with the customer panel in the future.</p>

### 3 Impact challenges

ISG Challenge	Company response
<p>The ISG challenged the company to demonstrate how the environment was being taken into account, or even driving, the company’s work on innovation.</p>	<p>The company’s two largest innovation projects undertaken in recent years are seeking to deliver significant environmental improvements. Work at Packington ST and Spernal ST seeks to remove pollutants to very low levels, air from the treatment process and recover product from the waste stream. Other examples were provided to the members, relating to its work on leakage, and their Global Research challenge to identify cutting edge methods or technologies to reduce flooding.</p>
<p>The ISG challenged the company to look at partnership working and provide greater differentiation between urban and rural areas, linked to economic growth in regions.</p>	<p>The company has a number of different partnership initiatives to improve environmental benefit. These ensure it creates the widest possible number of opportunities to work with and support partners e.g. STEPS (Severn Trent Environmental Protection Scheme) working with farmers to help them reduce their impact on waterbodies (surface and groundwater), ‘Cash for Catchments’ to support NGOs in delivering environmental benefits, CaBA partner to deliver catchment based solutions.</p>
<p>How will the company secure appropriate customer protection from CSO interventions when the scope and outcome is not clear.</p>	<p>The CSO intervention programme is driven by the company’s need to deliver WFD compliance. It has a Performance Commitment and outcome delivery incentive which protects customers in the event of under-delivery of WFD compliance. These were reviewed and accepted by the PC/ODI sub group.</p>

### Conclusion

Overall, the company appears to have undertaken detailed options appraisal to assess the best choice for investment and intends to phase the improvements over the forthcoming AMPs in line with legislative requirements. Careful consideration appears to have been undertaken to ensure that the options chosen for investment represent value for money for customers with initial screening undertaken to ensure alternative or innovative solutions are considered before traditional solutions.

# Security

Security requirements are underpinned by the obligation to ensure security of supply and mitigate against contamination of supply. These are driven by a number of UK Government regulations and guidance relating to physical and cyber infrastructure including Protective Security Guidance 2020, Water UK Security Standards 2020, National Cyber Security Centre guidance and advice from the Centre for Protection of National Infrastructure.

The company provided the ISG information on its pioneering security risk based approach and how this award-winning approach (Risk Management Programme of the year at 2017 CIR Risk Management Awards) was used to develop options at both programme and project level.

The company pointed out and the ISG accepted that this was a challenging topic for the company to engage with its customers as essentially it was Defra and the Centre for the Protection of

National Infrastructure that shaped the discussion and detail. Nevertheless, the company was able to distil from the customer research, particularly the deliberative research on Resilience, a number of key issues for customers. These included the expectation from customers that the company protects water supply against potential threats, including terrorism and that recovery plans are in place should disruptive events happen.

# Challenges

The challenges set out below combine those relating to customer engagement, process and impact.

ISG Challenge	Company response
<p>The ISG challenged the company to show what is being spent on Security in AMP6 and what the proposed spend will be in AMP7.</p>	<p>In AMP6, the company planned to invest c£25m on Security and Emergency Measures Directive (SEMD) security work by adopting the recognised prescriptive approach. By the end of AMP6, it is forecasting to have invested c£50m to deliver improvements. In AMP7, the company is currently forecasting c£85m investment for physical improvements (using its innovative risk based approach) and cyber improvements.</p>
<p>The ISG challenged the company to provide more clarity on residual risk for itself and customers. It should link research findings to the proposal and the bill impact of the work.</p>	<p>Given the current CPNI/DEFRA guidance, the company considers its High Priority National Infrastructure sites carry an intolerable risk exposure (to terrorism/hardened criminals). Post-investment this will move to tolerable (with residual risks still present) with for example, better detection, monitoring, access/egress systems. The company's internal security experts and cyber experts will sign off design proposals to ensure they meet the statutory requirements. External assessors will also be used to assure compliance and residual risk are appropriate. The proposal includes a 'Line of Sight' document to demonstrate how proposals take customer findings into account. The bill impact has been assessed in the same way as for other investment proposals; for budgeting only, c£100m new investment equates to £1 bill increase.</p>
<p>The ISG challenged the company to provide benchmark investments for other companies given its proposed programmes.</p>	<p>The company sought views from other companies but has been unable to access any meaningful reliable data on investment plans. United Utilities, Yorkshire Water, Thames and Severn Trent are the main companies who are required to adopt Protective Security Guidance on its High Priority National Infrastructure sites (as it carries the majority of the stock of these assets in England). It is expected that other companies will adopt a similar risk-based approach and, therefore, implement solutions to ensure residual risks are appropriate for their particular circumstances. It is also expected that other water companies will be ensuring compliance with the Network Information Systems Directive.</p>

## Conclusion

The approach adopted by the company in coordinating closely with relevant stakeholders in the security industry and in co-authoring best practice guidance demonstrates a close correlation of need with various regulatory bodies and stakeholders. This, in turn, leads to careful consideration of value for money for both the industry as a whole and also customers. It was also noted that cyber security would form part of the company's security proposal. The ISG has had appropriate responses to its challenges around the approach and methodology used to determine this Cost Adjustment.

# Resilient water service

Resilient water service involves ensuring that water is readily available for customers and this is underpinned by grid resilience (i.e. minimising single points of failure in the grid) and water treatment plant resilience (i.e. ensuring the availability of treatment plants irrespective of weather conditions).

Whilst in AMP6, grid resilience had primarily been focused around the Birmingham Resilience Project, in line with the definition above, the company has now looked more broadly at single points of failure for grid resilience and also looked more widely at water treatment

plant resilience to determine its programme for investment. The ISG undertook a review of the company's two stage optioneering process, at programme and individual project level, relating to single point of failure schemes (e.g. the Derwent Valley Aqueduct) and enhancement / improving resilience of Water Treatment Works. Detailed discussions were held with the company for each programme and individual project by use of real examples to demonstrate a need and whether the investment was the best option for customers.

During the course of our work, the company refined the quantum of costs associated with resilience programmes as it sought to coordinate the timing of programmes with supply/ demand investments. This helped to provide comfort that a process was being undertaken to ensure coordination between activities for each Cost Adjustment and optimisation such that timings could be coordinated and relevant efficiencies derived.

The review of proposals led to a series of detailed challenges by both the ISG and the Water Forum as a whole.

# 1 Customer engagement challenges

Water Forum Challenge	Company response
<p>The ISG challenged the company to be clear how and where customers are being consulted on both Water supply risk and Water Quality risk.</p>	<p>The company has used multiple sources of research data to understand customer expectations on both water quality and water supply risk. In addition to the insight from the research undertaken to develop its PR14 strategic resilience case for Birmingham, the company undertook further detailed deliberative research and in depth one-to-one interviews with customers in November 2017, with a whole day of deliberative research focused on Resilience where water quality and risk were reviewed. Customers indicated strong support for improvements to water quality and supply risk.</p>
<p>The ISG challenged the company that it needed to provide clarity that the optioneering and solution process delivers value for money and results in a plan that customers agree with.</p>	<p>Optioneering has been carried out at both programme level (for programmes) and at project level. Both drive value for money and different benefit streams. The company showed what options were considered and how customer views were factored into.</p> <p>The Choices research and deliberative research demonstrates that customers support the proposal within the cost estimate envelope (i.e. estimated bill impact). The company engaged specialist cost consultants to review estimates for a selection of projects which it considered to be representative of each programme. They consider that, given the stage in the project life-cycle, the company's estimates are competitive.</p>
<p>The ISG challenged the company to confirm if the Derwent Valley Aqueduct proposals will lead to a cost adjustment. And if so, whether specific customer research is needed.</p>	<p>In order to assess whether the company's resilience work should be included as a cost adjustment claim, it applied two tests: to systematically check if resilience was already provided by a wider set of remote assets, and to assess if a resilience solution was needed, what type of solution should be used (using the Cabinet Office's '4 components of Resilience' model - Keeping the Country Running: Natural Hazards and Infrastructure 2011). If resilience already exists, it is not included as part of the claim. If resilience was not present, the Cabinet Office guidance helped to identify an appropriate solution. The Derwent Valley Aqueduct (DVA) passed the tests and has been included (defined as 'redundancy' option in the Cabinet Office guidelines). The company agreed with ISG that specific project research may be required for projects in excess of £100M (the DVA is considerably less than this threshold – c£30M).</p>

## 2 Process challenges

ISG Challenge	Company response
<p>The ISG challenged the company to justify the significant changes in the proposed solutions and costs between those provided to the Water Forum in October 2017 and the ISG in December 2017.</p>	<p>The company has continually refined its proposed solutions in light of emerging information and also harmonised the different drivers of investment to identify holistic, more cost effective solutions. This led to improved cost positions.</p>
<p>The ISG challenged the company to make clear for each option what the benefits were for customers. It should also ensure support of these is evidenced by specific research.</p>	<p>Given the project life-cycle, the company has identified primary benefits only at this stage (i.e. will the solution solve the problem). During detailed feasibility and design, it is predicted that the company will be able to identify further benefits as more granular information comes to light and understanding of constraints improves. Extensive customer research findings have been summarised in each business case and the company's 'Line of Sight' document which links customer findings to proposed actions. Through AMP7 the company intends to undertake live research using its online Tap Chat community to gather dynamic feedback.</p>
<p>The ISG challenged the company to make clear how the options / plan is to be assured (technical, cost, TOTEX, innovation etc.).</p>	<p>The company's assurance process was presented to ISG in March 2018. For the cost adjustment claims, this included the cost build up, cost competitiveness and compliance with Ofwat PR19 guidelines (for Cost Adjustment Claims) that the ISG have used to test the company's proposals.</p>

### 3 Impact challenges

ISG Challenge	Company response
<p>The ISG challenged the company with regard to supply interruptions: what proportion of customers feel they should pay more to get the service they are already paying for?</p>	<p>The level of resilience service customers expect does not exist today across the totality of the Severn Trent customer base, for a number of historic factors and cost constraints. Over time the company has steadily improved resilience being mindful of bill impact. This proposal continues into AMP7. The service being proposed represents first time resilience (of this standard) for these customers. The Deliberative research and Choices research clearly shows a large majority of customers support our proposals (78%).</p>
<p>The ISG asked the company how the proposed investments in the options identified compare with that in AMP6.</p>	<p>The company has been delivering a resilience programme for many decades and this investment proposal continues this work. It continues to learn from experience and feed this into forward plans. The specific difference between AMP6 and AMP7 resilience programmes relates to programme scale. AMP6 relates only to one treatment work (Birmingham) and is very large. In comparison, AMP7 proposals relate to a number of smaller works across the whole asset base. The nature of the work is broadly similar across both AMPs.</p>

#### Conclusion

The need for Resilient Water Supply appears to be strong given customer research determining Resilience as a key priority. This has subsequently been reinforced by the experience of the Freeze Thaw event of March 2018 and the subsequent period of prolonged dry hot weather, both of which have presented challenges for the company in the management of their network and the provision of a resilient service to all customers.

A number of options have been considered in arriving at the scheme choices. This has been achieved by balancing the costs and cost effectiveness of the eradication of all single points of supply, with a network that is broadly resilient based, on a risk-adjusted evaluation of likely scenarios. There has been a clear evaluation of options seeking to find one that represents lower cost whilst not materially undermining risk mitigation.



# Customer Protection and managing uncertainty

waterforum

The ISG believed the company should ensure adequate protection of customers interests in relation to the proposed Cost Adjustments. Firstly, that there be persuasive evidence that the proposed solution represents the best value for customers in the long term and secondly customers were protected from failure to deliver the schemes.

The ISG sought evidence from the third-party assurance of the company's cost benefit analysis of options and on the preferred solution. The ISG also liaised with the sub group responsible for the scrutiny of Performance Commitments and ODIs to ensure that these could afford appropriate customer protection.



## Dealing with uncertainty

There is a third aspect of protection which the company considered towards the end of the plan process. How to protect customers from incurring costs of Cost Adjustments which might be needed but, then again, might not? The company informed the ISG and the Water Forum in June that they were looking to make changes to two draft Cost Adjustments: Water Supply and Demand and Wastewater Quality. The changes seek to protect the interests of customers by avoiding investment that would unnecessary upward pressure on bills.

The requirements for investment are changing in terms of new evidence, new guidance or environmental changes. The need for some elements of the original draft Cost Adjustment Proposals will be clarified by the emergence of new evidence between the submission of the company business plan and the end of AMP7. This might be in the form of completed investigations or studies, or from the publication of anticipated expert guidance.

The company now wishes to pursue an approach, known as “Real Options”. It will remove a range of schemes which might prove to be unnecessary

in the light of new and emerging evidence from its business plan submission. However, it will seek, through the approval of its business plan, authority to reinstate schemes, and levy the associated charges, should new evidence “trigger” the need to proceed. It is proposing a process by which the operation of this trigger would be subject to scrutiny and assurance, by regulators and other relevant stakeholders, including those who protect the interests of customers.

Changes to the Water Supply and Demand Cost Adjustment are proposed that reflect the uncertain impact of climate change on the need for, and timing of, a significant number of proposed new water supply schemes and uncertainty relating to the deliverability of proposed meter installations. These changes would reduce the cost of delivering this cost adjustment by £155m.

The Water Forum recognises that there is a strong desire from policy makers for greater interconnection between companies, which could help solve the projected water shortage in the South East. However, the Forum is also conscious that until Thames or another party commits to a trade, customers in the Midlands and North could incur costs without a corresponding

benefit. We have therefore challenged the company to identify innovative solutions that protects customers whilst helping address an issue of national significance. The company has proposed using its real options mechanisms as a way of progressing work on water trading, but protecting customers in the face of uncertainty. We are supportive of this approach and consider it is a pragmatic solution to a complex problem.

Changes to the WFD / Wastewater Cost Adjustment are proposed that included funding of all ‘Green’ schemes classified by the Government / Environment Agency but only request funding for ‘Amber’ (uncertain) schemes once the need is confirmed. The company assured the Water Forum that it would meet all its environmental obligations.

While accepting that these proposals appeared reasonable in principle, the ISG and the Water Forum expressed considerable concern about the timing and significance of such changes and whether they would have the support of customers. Subsequent meetings were held with the company’s CEO to address the Water Forum’s concerns and challenges that are set out on the following page.



ISG Challenge	Company response
<p>The ISG challenged the company to provide a clear rationale for the company’s change of view with regard to the proposed supply and demand and wastewater quality Cost Adjustments.</p>	<p>The company has undertaken deliberative research on the proposed uncertainty mechanism and believe its customers support its proposals as it gives them protection (in the event of under-delivery). These findings are also consistent with some quantitative results obtained through the online panel.</p>
<p>The ISG challenged the company to undertake additional specific research that customers support the changes proposed. This should include deliberative research and cover, amongst other things, bill volatility.</p>	<p>The company has conducted both deliberative research and research via our online Panel. Findings demonstrate customer support for the uncertainty mechanisms.</p>
<p>The ISG challenged the company to consider the impact on Performance Commitments and ODIs, especially the mechanisms for agreeing rewards / penalties. Where possible these should be outcome or at least impact measures.</p>	<p>The impact of the Uncertainty Mechanism will not change the service that the company is seeking to deliver in each investment proposal. It will only change the quantum.</p>
<p>The ISG challenged the company to identify what the mechanism for implementing a change in AMP7 would be. For example, what would be the decision making process for implementing a ‘Amber’ scheme during AMP7?</p>	<p>The company is working through its proposals to understand when an ‘uncertain’ project (i.e. Amber) becomes ‘certain’. On the wastewater programme, agreed criteria exists with the Environment Agency to move a project from Amber to Green (which relates to confirming environmental need and cost benefit). For the Supply Demand proposal, it will use the latest climate change information that will be available in CP18 (due late 2018) and remodel needs based on this data. Current needs are based on CP09 (nine-year-old data sets).</p>

### Conclusion

The company took the Water Forum’s concerns seriously. The CEO personally attended meetings to respond to the issues raised. The Water Forum was pleased that additional, in depth customer research was undertaken which resulted in some refinement to the proposed changes to the cost adjustments. Customers supported the proposals. The Water Forum was satisfied and reassured that the company was committed to high-quality customer research – even when it was not convenient.



# Company assurance

## The company applies three key lines of assurance to its work:

- First line of assurance: The provision of source information and reporting. Providing in-depth quality checks and reviews that involve assisting with the production of required documentation
- Second line of assurance: Ensuring that first line has undertaken its duties. Providing quality checks and reviews of systems and controls. Coordinates assurance activities between first and third line.
- Third line of assurance: Independent challenge of assurance provided in first and second line, reviewing the application and methodology of the processes and the ultimate integrity of the data. Performed by both external auditors (e.g. Jacobs, Water Forum) and our own Internal Audit.

The ISG felt that it was essential to supplement its own scrutiny of investment proposals with having access to the relevant outcomes of the programme of assurance. The Water Forum supported this perspective, and the company agreed to share the outputs of this work and facilitate any necessary dialogue with Jacobs prior to the completion of the Water Forum report.

The Water Forum is pleased to report that it has had sight of Jacobs's letter of assurance, which confirms that the company's assurance process has been rigorous and robust. This view is consistent with our own observations that the company's assurance is very high quality.



## Performance Commitments and ODIs offering customer protection

Performance Commitments (PCs) and Outcome Delivery Incentives (ODIs) are discussed in more detail in the next chapter. However, we have extracted the PCs and ODIs that relate to each Cost Adjustment as they illustrate an important element of customer protection.

Cost Adjustment	Performance Commitment	Comments
Water Supply and Demand	Leakage	Very Important to customers and mandated by Ofwat
	Per Capita Consumption (PCC)	Important to customers and mandated by Ofwat
	Risk of severe restrictions in a drought	Asset health has emerged an important area to customers; mandated by Ofwat
	Speed of response to visible leaks	Customers are concerned about the quantum of leakage and visible leakage. We provided a strong challenge to retain challenging commitments on the speed of response
	Abstraction Incentive Mechanism (AIM)	Reflects the company's ambition to reduce abstraction at environmentally sensitive sites. We reviewed the technical aspects of AIM and its suitability for the company's aquifers
	Increasing water supply capacity	Measure reflects the company's commitment to maintain the supply demand balance as detailed in the Water Resources Management Plan. The Investment Sub Group provided a strong challenge on the investment case for the WRMP
Wastewater Quality	Pollution incidents (cat 1–3)	Important to customers; mandated by Ofwat; reflects the company's environmental ambition to achieve EPA 4*
	Improvements in Water Framework Directive (WFD) criteria	The National Environment Programme (WINEP) obligations should meet the company's commitments under the Water Framework Directive
Security	Reducing the risks to our sites	This measure reflects the company's commitment to DEFRA obligation to improve the security at many our sites
Resilient Water Service	Water supply interruptions	Important to customers; mandated by Ofwat
	Unplanned outage	Asset health has emerged an important area to customers; mandated by Ofwat
	Resilient supplies	Measure reflects the % of customers whose supply can be restored within 24 hours. Customers support these improvements in resilience



# Assurance

## Assurance Statement

By interviewing the sub group leads and reviewing the draft chapter, the Peer Review team are clear that this workstream faced a series of challenges in being able to deliver the desired outcome.

However, through the persistence and expertise of the group, as well as working within the robust overarching governance of the Water Forum, the sub group have been able to influence the company to improve the way they use customer insight and articulate how they have used it to drive investment decisions.

The Peer Review team are satisfied that the sub group maintained a level of independence throughout the challenge process, demonstrating this by continually referring back to Ofwat's requirements.



# The Water Forum's concluding views

Throughout the ISG discussions with the company on its proposed Cost Adjustment we have robustly applied the four key tests set out in the Ofwat Aide Memoire:

## **Is there evidence – assured by the Water Forum – that customers support the project?**

The company has carried out extensive customer engagement that is detailed in the [A1 Appendix: Engaging Customers](#). Specifically, with regard to the proposed Cost Adjustment claims, the table below summarises customer engagement / consultation in relation to each claim.

The output from customer engagement and consultation has been thoroughly analysed by the company to establish for each proposed Cost Adjustment the key issues identified by customers, the sources of evidence that support this and the company's understanding and response. Using this extensive information, the company has been able to provide a weight (score) to each key issue that indicates the level of customer support.

## **Does the proposal deliver outcomes that reflect customer priorities identified through customer engagement?**

We are confident that the Cost Adjustment proposals will deliver outcomes that customers identified as priorities in the extensive customer engagement carried out by the company.

## **Is there Water Forum assurance that the company has engaged with customers on the project and this engagement has been taken into account?**

The ISG are confident that the company has carried out extensive engagement with customers on matters relating to each of the four Cost Adjustments outlined above.



**Is there persuasive evidence that the proposed solution represents best value for customers in the long term, including evidence from customer engagement?**

Analysis of what represents best value for customers has been a priority for the ISG. We can confirm the company has conducted thorough, assured, optioneering and cost benefit analysis and has arrived a solution that represents best value to customers.

The ISG has contributed significantly, through its scrutiny and challenge, to the development of a series of refined investment proposals which form a significant part of the business plan submission.

Customer bills could be lower if these investments were not to be made, as is illustrated in the Table below, but customers would not then benefit from the improvements to their service and to the environment which will arise if these schemes are well implemented.

Increase to customer bills over AMP7 by Cost Adjustment is set out below:

Strategic Investment	Cost adjustment (£m)	Estimated Net bill impact (2025)
Water Supply resilience	1-3	£1
Water Supply Demand	8-10	£4
Wastewater environmental programme	8-10	£3
Security	1-3	50 pence

The proposed cost adjustments are consistent with customer priorities and represent the best value for customers in the long term. They include adequate customer protection.



# Performance

This chapter describes our challenges to the company as it developed its measurement framework and then specific challenges by Performance Commitments.

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# Introduction – The Performance Sub Group (PSG)

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Water companies make Performance Commitments to their customers on the quality of the services they will deliver for them.



**Dr Steven Wade**

Sub Group Lead

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The new Performance Commitments include 14 common commitments defined by Ofwat and 27 bespoke commitments defined by the company.

The Water Forum, through this sub group, has ensured that bespoke Performance Commitments are focused on outcomes that matter most to customers and that this is evidenced by customer research, evidenced in the [Engagement chapter](#).

Outcome Delivery Incentives (ODIs) are an important part of Ofwat's approach and can help ensure that companies deliver improvements in services through incentives that can be reputational or financial. Financial ODIs include under-performance penalties if companies do not deliver their Performance Commitments for their customers and, where appropriate, outperformance payments for going beyond the stretching Performance Commitment level and delivering additional value for customers. The PSG challenged the company on whether the ODIs reflected customer needs and priorities and whether targets and incentives were sufficiently stretching, transparent and supported by customer research.

The company's current performance is reflected in its existing 45 Performance Commitments, which were developed for the business plan in 2014. The July 2018 [Annual Performance Report](#) shows that the company performed well in most areas and that it anticipates good performance in all areas by the end of this business planning period. The existing list of 45 Performance Commitments was a starting point for the sub group's work programme.

Changes in industry methods, the standardisation of some common commitments and specifically the Ofwat methodology published in December 2017 informed the company's design of Performance Commitments (PCs) and ODIs. Our challenge and assurance activities involved early engagement to set the frameworks for design and to ensure that PCs and ODIs focused on the right outcomes in response to customer research and other evidence, including the company's (and other water companies') past performance.



# Scope and focus of Water Forum challenge

The Forum members focused most effort on the bespoke Performance Commitments and the setting of targets for *all* Performance Commitments.

The Water Forum was guided by the Ofwat methodology and Aide Memoire for Customer Challenge Groups (CCGs). The Water Forum challenged the company on how it engaged with customers on its current levels of performance and how it made use of customer research and other evidence to inform outcomes, its choice of Performance Commitments and ODIs.

Our early engagement on the scope and definition of Performance Commitments (*prior to the publication of the Ofwat methodology*) was important to ensure that the company was incentivised in areas that are most important

for its customers. We saw this work as of great strategic importance, as it has been clear from the current Severn Trent AMP that those areas associated with stretching PCs and strong incentivisation have seen the greatest focus and improvement.

The Ofwat Aide Memoire sets out seventeen specific areas for Water Forum challenge on PCs and ODIs and highlights other areas of common interest with other sub groups. The main areas are grouped on the following pages with cross-references to sub-sections in our report.



## The scope of our challenge on PCs and ODIs

Our work area	Ofwat Aide Memoire prompt	Example challenges from the Water Forum	Response by the company
The scope of Performance Commitments	General approach	The retention, replacement and refinement of PCs to provide a balance across five Ofwat themes and seven outcomes	✓
		The development of process flow charts called "driver trees" that link company activity to outputs and outcomes	✓
		Setting a transparent framework prior to detailed design	✓
Definition of Performance Commitments	Common PCs Leakage PCs Bespoke PCs	Challenge on insufficient evidence to drop 'leakage fix in 24 hours' PC	✓
		New PC on the time taken to fix customer reported leaks	✓
		New PC on low pressure informed by customer research and complaints data	✓
		New PC and refined definition on customer education	✓
	Transparency of PCs	Sewer flooding commitments that focused on outcomes	✓
	Scheme specific commitments	Continued discussion on previous Elan Valley Aqueduct commitments and links to Investment Sub Group discussions	See chapter 6



## The scope of our challenge on PCs and ODIs

Our work area	Ofwat Aide Memoire prompt	Example challenges from the Water Forum	Response by the company
Performance targets, including the use of multiple sources of evidence and ODI design	Stretching PCs Triangulation	The use of "Choices" research for triangulation of evidence	✓
	Setting initial service levels for:	The proper treatment of outliers in the company's analysis	✓
	PCs Consultation on ODIs In Period ODIs	Detailed discussion and scrutiny on how the company sets its ODI rates based on customer research and compared to other companies	✓
	Setting ODI rates Overall size of ODIs ODIs for resilience PCs ODIs for asset health PCs Enhanced ODI outperformance payments	Increasing ODI targets and rates in areas where the company could do more, e.g. biodiversity	✓
Other aspects and cross-cutting areas of interest	Vulnerability ODIs	Covered in the vulnerability work as part of the Retail Sub Group	See chapter 5
		Challenge on Household Voids Performance Commitment and targets	✓
	Abstraction Incentive Mechanism (AIM)	Detailed discussion of AIM and how this mechanism would work  The Water Industry Strategic Environmental Requirements (WISER) were discussed in detail and the company was challenged to align its Performance Commitments to this programme	✓



# How the Water Forum has exercised its remit

waterforum

The Water Forum perceived that its scrutiny of the metrics in the business plan was the final and critical step in ensuring that customer views were reflected in the business plan.

To provide in depth focus, the Water Forum appointed a sub group to cover PCs and ODIs with five members, including members that were also involved in the customer research and infrastructure sub groups to capitalise on cross group learning. The members had specific technical expertise in the environment, biodiversity, water resources, performance monitoring and evaluation as well customer advocacy experience (Consumer Council for Water (CCWater) members). The members had the technical expertise to understand the data used for PCs, as well as experience of other water companies and as Severn Trent customers themselves.

The sub group had meetings that covered technical material and examined the company's processes for collecting data, modelling and analysis and specific customer research that informed PCs and reported back to the main Water Forum. On specific topics there were additional teleconferences and one-to-one meetings that were held and reported back to the main Water Forum.

The Water Forum delegated in-depth discussion to the sub group but at each stage, the emerging proposals were brought back to the main Water Forum for additional scrutiny and debate. In this way, every company's proposal was reviewed twice and, in many cases, several times as revisions and new proposals were resubmitted by the company in response to feedback.



# How the company listened

## How customers have been consulted on the PCs and ODIs

	PR14 customer research	Deliberative research	Customer tracker	Willingness to Pay research	Revealed preference	Complaints analysis and operational insight	Choices research	ODI design research	Acceptability research
PCs		✓	✓	✓		✓	✓		
ODIs	✓	✓		✓	✓	✓	✓	✓	✓



# The Water Forum's challenge of Severn Trent's approach

## Outcomes

Responding to the needs and wants of its customers.

Severn Trent's outcomes have evolved from the previous plan, which included ten outcomes. The outcome definitions were refined in response to customer research and aligned to the hierarchy of needs, following challenge from the customer research sub group. The selection and appropriate wording of revised outcomes was covered at full Water Forum meetings (e.g. March 2018) and this sub group focused on assurance on the selection of appropriate PCs to drive each of the outcomes (next section).

The sub group considered the impact of performance metrics for all but the blue outcomes (6 and 9). Outcome 6 is measured by mandatory and common Performance Commitments, so there is no discretion. Outcome 9 has no Performance Commitments and so has not been considered in our approach.

Outcome 1	Lowest possible bills
Outcome 2	Good to drink
Outcome 3	Water always there
Outcome 4	Wastewater safely taken away
Outcome 5	A service for everyone
Outcome 6	<b>Outstanding experience</b> – covered by common (and mandatory) Performance Commitments
Outcome 7	The thriving environment
Outcome 8	<b>A positive difference</b> – in the community
Outcome 9	<b>The company you can trust</b> – no Performance Commitments



# Water Forum strategic challenges

waterforum

The sub group challenged the company extensively throughout the process of developing proposals for Outcomes, Performance Commitments, targets and Outcome Delivery Incentives.

Much of our challenge was strategic, encouraging the company to approach the task in a transparent and planful way. Here we identify some of the tools that were developed in response to that challenge.





## Performance Commitments

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**Severn Trent has devised a framework to determine the:**

- **scope**
- **definition**
- **transparency**

**of its Performance Commitments – responding to the needs and wants of its customers.**

Given the extensive programme of research and therefore our detailed understanding of customer needs and wants, the Water Forum wants to see the business plan reflect those customer requirements. The adage that ‘what gets measured gets managed’ is the rationale for ensuring that measures articulate as closely as possible what matters to customers.

For this reason, the scope and definition of PCs is the critical first step in developing incentives (and penalties) for the company to deliver services that meet customer expectations.

This is not an easy thing to achieve. PCs and associated ODIs should have a material impact on how the company operates and performs over the next five years. If the scope or balance is wrong, they will not be responding to customers’ needs and if the definitions are wrong they may be doing the wrong things (and being rewarded/penalised for the wrong things), which will not deliver the right outcomes for customers. In general, our challenge has been to 1) focus strongly on outcomes, 2) make good use of the customer research including the on-line panel (Tap Chat) and 3) adopt a rigorous approach to using all the available evidence to define PCs and to set appropriate targets.

**The development of “driver trees” that link company activity to outputs and outcomes.**

We challenged the company to demonstrate the links between their activities, factors such as extreme weather, the outputs of their activities and the outcomes for customers.

This led the development of “driver trees”, which informed sub group discussion and helped to define the final PCs. A driver tree is a flow or systems diagram that links inputs, processes, outputs and outcomes in a logical way so it is clear how they are linked and what factors influence the outcome.

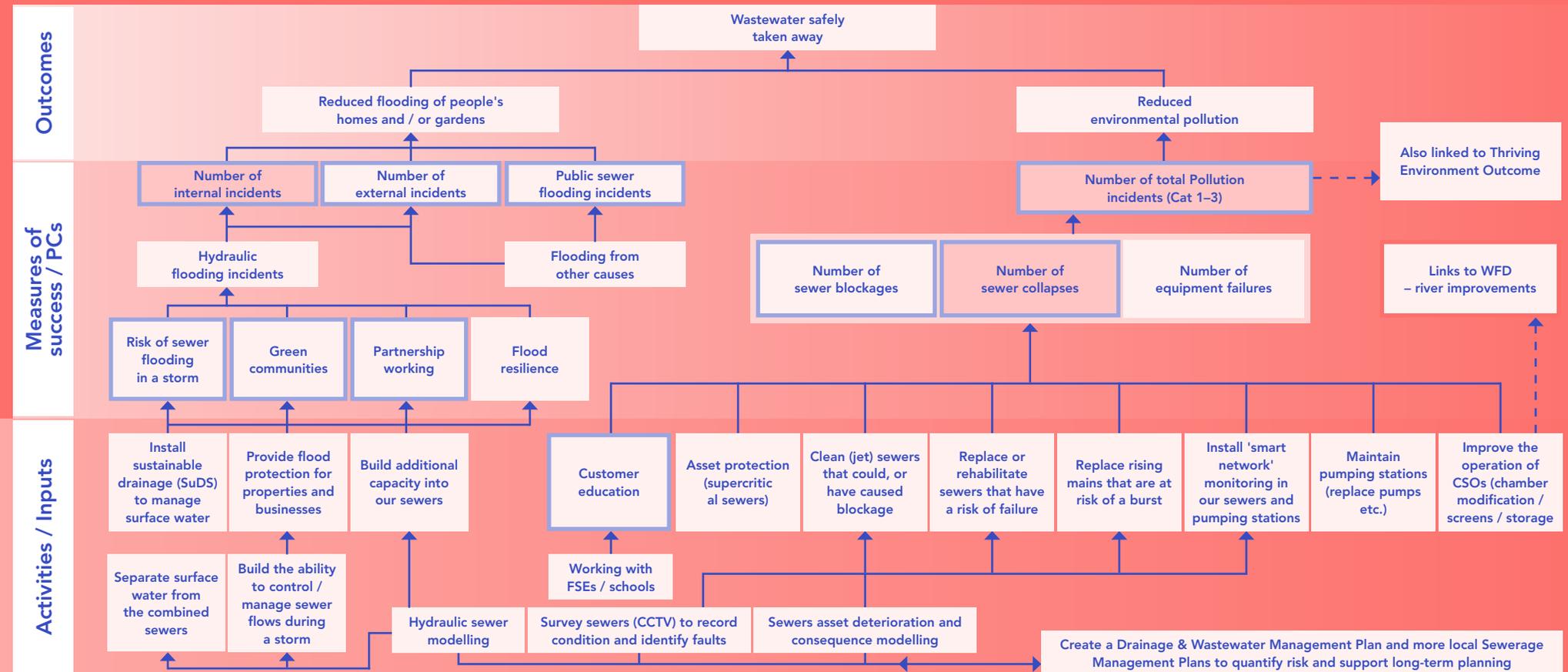


An example is shown below.

The process of developing and documenting these relationships, which was novel to Severn Trent, proved very useful in clarifying for the company which specific activities would be those that would have the biggest impact in moving the principal outcomes.

This, in turn, enabled the PSG to challenge the company to identify PCs and ODIs that would incentivise improvements in the key drivers of performance.

# Innovation



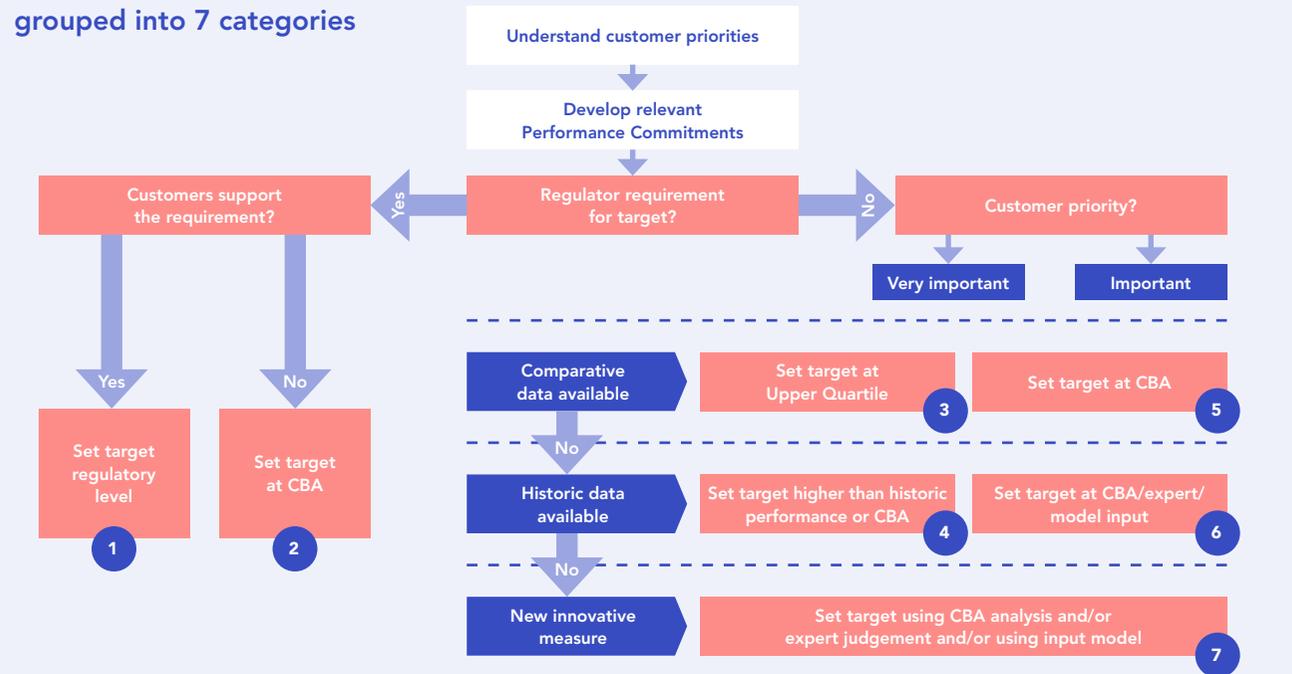
### Setting a transparent framework prior to detailed design.

In every stage of the work programme, we challenged the company to produce a clear framework and methods for developing PCs and ODIs before embarking on detailed design and committing to any specific methods or presenting ‘faits accomplis’ final PCs. This involved the company presenting proposed approaches, which raised challenges. These were responded to with either:

- an improved approach
- worked examples
- options for the next stage of work
- fast-tracking additional customer research.

One example challenge was on the method for PC target setting. In response, the company developed a framework for the categorisation of PCs using customer research, comparative data and historical performance data, which determined the method used for target setting. The framework was tested with the full Water Forum, generated further debate and, once the Forum was content, the method was approved by the Water Forum and implemented by the company. The Water Forum noted that the use of data is a critical input to future development of the framework.

### Commitments can be grouped into 7 categories



In this graphic, Cost Benefit Analysis ("CBA") refers to the threshold at which a level of improvement is cost beneficial. Each PC was categorised into one of the seven "destinations" in the framework, determining the approach to target setting which was adopted.



## Target setting

In relation to the setting of targets for future performance, the sub group advocated an approach in which, for each proposed PC, the company populated a data template, with accompanying narrative, to justify the proposed targets that they wished the Customer Challenge Group to consider.

The population of these templates was itself informed by a number of frameworks that were proposed by the sub group, developed by the company, and agreed by the Water Forum.

### These frameworks covered issues such as:

- The approach to be taken to estimate Upper Quartile projected performance in 2025.
- The approach to handling intrinsic statistical uncertainty, including moving averages, deadbands, caps and collars.
- The decision as to whether an area of performance should be financially incentivised or reputation only.
- The use of thresholds for, and rate of, enhanced incentives for frontier performance, or very poor performance.

### The template included, typically, data on the following:

- Historical and current performance in this and related areas of performance for Severn Trent.
- Comparative information, where available, from other companies.
- Rationale and calculations, with underlying assumptions, to inform estimation of Upper Quartile 2025 performance, where policy dictates that this is relevant.

- Cost assumptions concerning proposals to improve performance, including marginal costs.
- Where relevant, proposed standard and enhanced ODI rates, with the approach used to the triangulation, synthesis and judgement on the choice of rate.
- The principal findings of importance from customer engagement on this area of performance, with links to the research compendium, where more detailed customer evidence could be scrutinised.

An example of such a template, which covers all of the proposed PCs and ODIs relating to the outcome *The thriving environment*, can be found in the [business plan](#).

This data formed the basis of our discussion and challenge as to the proposed targets that would be adopted by the company in the draft business plan.



### Defining Upper Quartile

The sub group challenged the company on its approach to target setting to ensure that the company would adopt stretching targets. This challenge was manifest particularly in two areas.

The company's initial approach to the aim to be Upper Quartile focused on being ranked now lower than third amongst the Water and Sewerage Companies (WASCs) on a parameter. The sub group pointed out that, for some parameters, performance is very skewed and encouraged the company to engage in more robust statistical modelling to estimate the 75th percentile of performance as a threshold. The company accepted this challenge and have adopted this approach.

### Stretching Targets

The sub group challenged the company on its approach to target setting to ensure that the company would adopt stretching targets. This challenge was manifest particularly in two areas.

Firstly, the company's initial approach to the aim to be "Upper Quartile" focused on being ranked now lower than third amongst the Water and Sewerage Companies (WASCs) on a parameter. The sub group pointed out that, for some parameters, performance is very skewed and encouraged the company to engage in more robust statistical modelling to estimate the 75th percentile of performance as a threshold. The company accepted this challenge and have adopted this approach.

Secondly, the sub group pressed the company to be more ambitious in areas of performance where they were already at or close to frontier performance. This included areas which have been the subject of rapid recent improvement, with significant concomitant reward, such as the reduction in incidence of external sewer flooding.

### Handling volatility

Many of the detailed and searching discussions on targets themselves focused on areas of performance that are crucial in the eyes of customers, but which are also subject to inherent volatility. We were reminded by the company of the methodology guidance and its strictures on limiting the use of mechanisms to handle such uncertainty, but were also concerned to avoid undue bill volatility. Examples of mechanisms that are available to handle such volatility include setting targets as moving averages, the use of deadbands, and the use of caps and collars.

The company was supported by the sub group to create a framework, or decision tree, which limited the use of these devices to those circumstances where some such protection for customers was seen as essential.



The results of the application of this framework as at our main Water Forum meeting in May 2018 are shown here.

Performance Commitment	Financial	Reputation	Cap	Collar	Deadband
Water supply interruptions	●	○	○	●	○
Pollution incidents	●	○	○	○	○
Internal sewer flooding	●	○	○	●	○
Unplanned outage (asset health – water)	○	●	○	○	○
Leakage	●	○	○	○	○
Per capita consumption (PCC)	●	○	○	○	○
B6 asset stewardship burst mains	●	○	○	○	○
Sewer collapses	●	○	○	○	○
Resilience – drought risk	○	●	○	○	○
Risk of sewer flooding in a storm	○	●	○	○	○
Treatment works compliance	●	○	○	○	●
Compliance risk index	○	○	○	○	●
C-Mex	●	○	tbc	tbc	tbc
D-Mex	●	○	tbc	tbc	tbc
Number of complaints about DW quality	●	○	○	○	○
Farming for water	●	○	○	○	○
Low pressure	○	○	○	○	tbc

Performance Commitment	Financial	Reputation	Cap	Collar	Deadband
Abstraction incentive mechanism	●	○	○	○	○
External sewer flooding	●	○	○	●	○
Number of sewer blockages	●	○	○	○	○
Partnership working	●	○	○	○	○
Green communities/reduce surface water floods	●	○	○	○	○
Improvements in river water quality	●	○	○	○	○
Water framework Directive	●	○	○	○	○
Biodiversity	●	○	○	○	○
Compliance with sludge disposal standard	●	○	○	○	○
Carbon footprint	●	○	○	○	○
Resilience	●	○	○	○	○
Speed of response to visible leaks	●	○	○	○	○
Customer Education	●	○	○	○	○
Public sewer flooding in public spaces	●	○	○	○	○
Number of voids	●	○	○	○	○
Service vulnerability	○	●	○	○	○
Financial vulnerability	○	●	○	○	○



## Uncapping

Following the publication of the APR for 2017/18 the company informed the Water Forum that it planned to apply for the cap, of 2% of the Return on Regulatory Equity, on its ability to gain rewards through its Wastewater price control, to be lifted. It argued that very strong improvements, especially in relation to sewer flooding, meant that the company was now delivering frontier performance. The incentive to deliver further outperformance would be diminished if the cap stayed in place.

The Water Forum challenged the company on aspects of these proposals. In particular, it asked the company to test the reaction of customers to the proposals, which it did. Customers were broadly supportive of the arguments made and, in the context of anticipated bill reductions

going into the next AMP and reassurances about the pace of any bill consequences arising from the lifting of the cap, were not opposed to the proposals. The Water Forum was aware that the provisions of the PR14 settlement allowed for a company to make a case that a cap on rewards be lifted.

This is potentially relevant to the submission of the PR19 Business Plan, as the outcome of a successful application for the cap to be lifted is likely to be further focus on this aspect of performance, which would affect the projected baseline performance, from which Performance Commitments would be set for the period 2020–2025. The Water Forum challenged the company, in the event of its application for uncapping being successful, to commit to setting PCs for 2020–2025 for internal and external sewer flooding that reflected this potentially improved

baseline. The company has responded positively, saying that its PCs would be based on an 8% improvement in external sewer flooding and a 9% improvement in internal sewer flooding from the 2019/20 outturn.

However, if uncapped and in the event of a deterioration in performance during the remainder of AMP6, it would retain its commitment to the baseline projected in its business plan submission. The Water Forum welcomes these proposals.



## Managing conflicting views from customer research through triangulation

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As is described in more detail in the Engagement chapter, we had access to a wide variety of results from a very varied range of research.

It was clear that those exercises that engaged customers in depth, and those which provided context, for example of the company's current comparative performance, had a very significant impact on customer views about priority, and priority for further investment. In other words, the priority afforded by customers to a particular topic could vary within and between pieces of research or elicitation of insight.

These differences needed to be reconciled. This rich data included the results of a number of exercises to elicit customer Willingness to Pay (WTP) for service improvements. Some of these exercises were in the context of customer views on relative priorities overall; in other exercises the customers were asked about their

willingness for the company to be rewarded, or penalised, for performance that was above or below that targeted.

Where possible, we asked the company to develop, for scrutiny and challenge, a framework to guide the reconciliation of the sometimes widely varied results. The company's framework comparison across the industry, looked at other sources of valuation data, across different time frames.

We were, as a group, particularly concerned about the results of WTP research in areas where, from first principle, but also from observation of qualitative research, we doubted the meaningfulness to typical customers of the measures used. Examples include miles of river quality improved, hectares of improved biodiversity, experience of low pressure, and reductions in a range of mixed pollution events. We formed the view that these suffered from a "unit" effect. That is that, whilst customers identified the overall importance in their eyes of this area of performance and afforded it overall priority, when this priority was divided by the number of units improved, it led to results that

could not be relied upon. By way of example, customers appeared to be willing to pay more than £150,000 for an individual property to be no longer subjected to low pressure.

In these areas, we challenged the company in triangulation to choose more credible values, and to be transparent about the rationale for the choice.

Supported by the sub group, and with advice from an external economic consultancy, the company developed a framework to conduct triangulation. This built on the principles of the ICS guidance document commissioned by Consumer Council for Water (CCWater). The Water Forum endorsed the use of this framework.

The application of the framework yielded eight different estimates of WTP for each of 15 types of improvement. These estimates derived from the wide and varied range of relevant customer research, along with previous surveys conducted by the company.



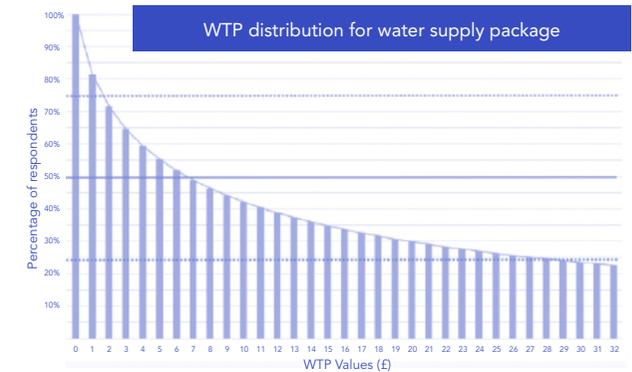
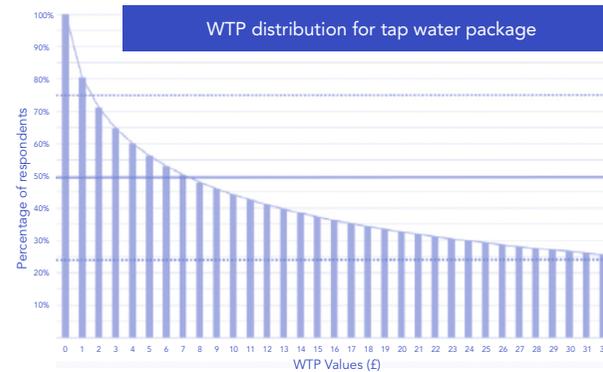
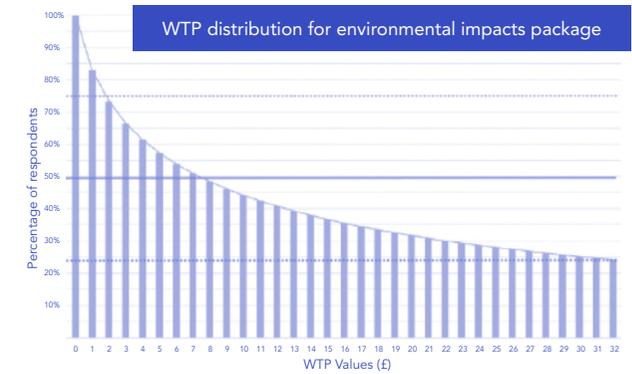
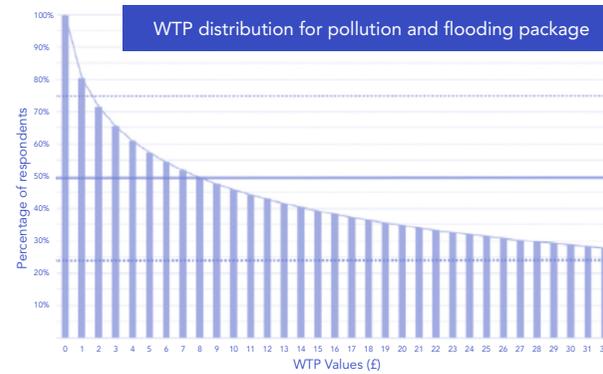
The scale of variation between the extreme values for the same item of improvement was very considerable. For example, WTP to avoid a single episode of internal sewer flooding was from £61k to £160K depending on the weighting given to results from different surveys. The analysis covered all of the PCs where a financial incentive was to be proposed. The sub group looked closely at the rationale for a preferred choice between this range of values.

It compared the results with other available data. It supported the company view that it should use a consistent mathematical approach for 11 of the types of improvement, which for these generated values that were towards the middle of the range. Frontier Economics conducted a peer review which broadly supported this approach.

Importantly and innovatively, in response to challenge, the company plotted the distribution of the results of WTP surveys to exclude the possibility of bimodal effects, where a mean value would not be appropriate.

**An example of the output of this work is shown to the right.**

### Distribution of results for our different packages





For an additional four types of improvement, the sub group advised that the application of this approach would yield results that should be subject to additional scrutiny and investigation. This included in-depth review of relevant qualitative research in these areas. The areas were: improvements in complaints about taste and smell of tap water, low water pressure, water supply interruptions between six and 12 hours and river water flow.

In-depth discussions, including further customer engagement, led to the agreement of specific valuations for each of these four areas of improvement, that were supported by the sub group and endorsed by the Water Forum.

This overall suite of valuations were then used in relevant capital planning, and to develop ODI proposals. These formed the basis of additional customer research, both in terms of the potential impact of a package of ODIs, and in terms of the overall acceptability to customers of the business plan.

Finally, for a small number of common indicators, Ofwat proposed that accelerated or enhanced ODI rates should be applied for exceptionally good (or bad) performance, that might be regarded as influencing the frontier of performance. The sub group supported the company in developing proposals for these enhanced incentive rates.

We challenged the company to adopt an approach to the setting of these rates based on moving away from the typical 50:50 share of benefits between customers and the company. The company agreed to adopt a sharing rate that would be 75:25 in the company's interest, as opposed to the multiple rates recommended by external advisers. The sub group was unconvinced by arguments that the benefits to customers nationally from an improved frontier threshold should be paid for by Severn Trent customers, and the company agreed.

## Thematic challenges

Through our strategic challenge and the deployment of the tools developed by the company, a number of themes emerged.

### **The retention, replacement and refinement of PCs to provide a balance across five Ofwat themes and the Company's outcomes.**

The company's starting point was the list of PCs used to monitor company performance in the current AMP. These were amended for use in PR19 to address specific changes mandated by Ofwat, including the introduction of common PCs and the requirement for PCs to cover the five price controls as well as the themes of resilience, the environment and the Abstraction Incentive Mechanism<sup>8</sup>. Whilst we considered all Performance Commitments, we accepted these amendments and focused on the bespoke PCs where customer perspectives could influence choices on the number of PCs, their scope and exact definition.



The company presented some initial proposals and long list of potential PCs. These were reviewed at the November 2017 sub group meeting and January 2018 full Water Forum. Our initial challenges covered all PCs and were focused on retaining specific PR14 PCs of interest to customers, particularly where there was a possibility that they could be dropped, improving some unclear definitions and agreeing that some were now redundant. Those under particular scrutiny included the speed of response in fixing leaks, external sewer flooding and the number of serious pollution incidents. In addition, we challenged the exact definition of the mains bursts and sewer blockages to focus on results rather than introducing 'event' or 'process-based' indicators.

The satisfactory coverage of PCs across both the themes in the Ofwat methodology and the outcomes was tested at a full Water Forum meeting in a break-out workshop, and the initial challenge was closed in January 2018.

## Asset health

Customers gave a clear message in research that they wanted reassurance that the company would invest in the maintenance and enhancement of assets, especially when shown the comparative performance of the company in research.

The sub group challenged the company to demonstrate that a failure to invest in maintenance would be reflected in deteriorating performance in the suite of chosen PCs, and substantial penalties, such that they would be adequately incentivised not to do so. Working with members of the Investment Sub Group (ISG), the sub group scrutinised the asset deterioration models used by the company, and a range of credible asset health scenarios, with the consequent modelled impact on headline PCs, including interruptions to supply, the CRI, mains bursts, leakage, etc.

This exercise demonstrated that, after a lag period, a total failure to invest in maintenance would lead to deterioration in these parameters of performance that could result in penalties in excess of £100m per annum. The sub group was satisfied that there was adequate customer protection from the proposed suite of PCs and ODIs, but that CCWater would engage annually with the company on its maintenance proposals which fall within baseline expenditure, given the importance of this topic to customers.



## Resilience

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A number of the proposed outcomes and PCs are particularly relevant to the delivery of resilient services. Resilience emerged as a key priority for domestic and non-household customers, especially in forms of research which were in depth and in which the challenges of resilience for future generations were explored. Customers of the company who experienced interruptions to supply or service failures during the work to develop PCs and ODIs were recruited into a number of exercises to gain insight from their views and experiences, which was as a result of challenge from the sub group, but is much to the company's credit.

It is of interest that the investigation of the life impact and additional costs borne by those who experienced an interruption to supply were less marked than had been anticipated, perhaps because of the quality of the management of the incident. On the other hand, in research conducted by CCWater into the experience of customers affected during the Freeze Thaw event, customers' reported experience showed significant room for improvement. There are several examples where service improvements, planned following the resilience challenges that have been evident over the early months of 2018, will be implemented during AMP7, and the outcomes tracked through this suite of PCs.



# Water Forum specific challenges

The Water Forum scrutinised and challenged each of the Performance Commitments and their associated ODIs.

In this table, we have summarised, for each outcome and PC, the extent of the challenge. Those flagged in dark blue were the areas which required greatest scrutiny.

## Scorecard

### Severn Trent bespoke PCs and Water Forum challenge

Nature and strength of challenge	Comments
No challenge, assurance only	No challenge, for example for mandatory PCs.
Refinement and assurance	An area of minor challenge, refinement of definitions, commitments or ODIs and assurance.
Moderate challenge and assurance	An area of moderate challenge, where there were different views and changes needed to reach agreement.
Strong challenge and assurance	An area of significant challenge leading to new commitments, significant new analysis or customer research.



**Severn Trent Bespoke PCs and Water Forum Challenge**

Challenge	Performance Commitment (grouped by Outcome)	Theme	Comments (including response)
<b>Outcome 1: Lowest possible bills</b>			
Refinement and assurance	Reducing residential void properties	Financial vulnerability	Requirement from Ofwat.
Refinement and assurance	Reducing residential gaps sites	Financial vulnerability	Requirement from Ofwat.
Refinement and assurance	Reducing business void and gap site supply points	Financial vulnerability	Requirement from Ofwat.
<b>Outcome 2: Good to Drink</b>			
No challenge, assurance only	Water quality compliance (CRI)	Asset Health	New measure, developed by the DWI and mandated by Ofwat.
No challenge, assurance only	Water quality complaints	Service now	Discolouration is a continuing concern for customers and the proposed commitments and measures are appropriate.
Refinement and assurance	Farming for water	Environment	Updates made to reflect greater focus on the outcome of engagement with farmers.
Refinement and assurance	Protecting our schools from lead	Community	Introduced to reflect an increasing focus on lead and the well-being of our communities, supported by the Drinking Water Inspectorate.
<b>Outcome 3: Water always there</b>			
Moderate and assurance	Water supply interruptions	Service Now	Important to customers; mandated by Ofwat.
Moderate and assurance	Leakage	Service Now	Important to customers and mandated by Ofwat.
Moderate and assurance	Per capita consumption (PCC)	Environment	Important to customers and mandated by Ofwat.
Strong and assurance	Mains Bursts	Asset Health	Asset health has emerged an important area to customers; mandated by Ofwat.
Refinement and assurance	Unplanned outage	Asset Health	Asset health has emerged an important area to customers; mandated by Ofwat.



**Severn Trent Bespoke PCs and Water Forum Challenge**

Challenge	Performance Commitment (grouped by Outcome)	Theme	Comments (including response)
Refinement and assurance	Risk of severe restrictions in a drought	Resilience	Resilience is important to customers, although current levels are perceived to be acceptable.
Strong and assurance	Speed of response to visible leaks	Service Now	Customers are concerned about the quantum of leakage and visible leakage. We provided a strong challenge to retain challenging commitments on the speed of response.
Moderate and assurance	Persistent low pressure	Service Now	Complaints data shows low pressure is important for customers.
Moderate and assurance	Abstraction Incentive Mechanism (AIM)	Environment	Reflects the company's ambition to reduce abstraction at environmentally sensitive sites. We reviewed the technical aspects of AIM and its suitability for the company's aquifers.
Refinement and assurance	Resilient supplies	Resilience	This measure incentivises better response and resilience to incidents and restoration of continuous supplies.
Moderate and assurance	Increasing water supply capacity	Resilience	Measure reflects the company's commitment to maintain the supply demand balance as detailed in the Water Resources Management Plan. The Investment sub group provided a strong challenge on the investment case for the WRMP.
Refinement and assurance	Security – reducing the risks to our sites	Resilience	This measure reflects the company's commitment to DEFRA obligation to improve the security at many our sites
<b>Outcome 4: Wastewater safely taken away</b>			
No challenge, assurance only	Internal sewer flooding	Service Now	Important to customers; mandated by Ofwat.
No challenge, assurance only	Pollution incidents (Cat 1–3)	Environment	Important to customers; mandated by Ofwat; reflects the company's environmental ambition to achieve EPA 4*.
Moderate and assurance	Sewer collapses	Asset Health	Asset health has emerged an important area for customers; mandated by Ofwat.
Refinement and assurance	Risk of sewer flooding in a storm	Resilience	Mandated by Ofwat.
Strong and assurance	External sewer flooding	Service Now	Important to customers and mandated by Ofwat. We challenged the company to improve commitments to reduce external flooding.
Strong and assurance	Sewer blockages	Asset Health	We provided a strong challenge to focus on the reducing blockages and outcomes of reduced flooding, instead of a process based indicator suggested by the company.
Moderate and assurance	Public sewer flooding	Service Now	Important to customers; we challenged the company to do more on reducing flooding on roads and footpaths.



### Severn Trent Bespoke PCs and Water Forum Challenge

Challenge	Performance Commitment (grouped by Outcome)	Theme	Comments (including response)
Strong and assurance	Green communities	Environment	Helps enhance customer satisfaction; Our challenge was to have a Performance Commitment reflecting work on Natural Capital.
Strong and assurance	Collaborative flood resilience	Resilience	Important to customers and aligned with Defra guidelines to work in partnership to reduce flooding.
<b>Outcome 5: Service for everyone</b>			
Moderate and assurance	Help to pay when you need it	Financial vulnerability	Important to customers; covers the affordability requirement of Ofwat. This area was challenged and assured in the Retail Sub Group.
Moderate and assurance	Supporting our Priority Service customers during an incident	Service vulnerability	Important to customers; covers the vulnerability requirement of Ofwat. This area was challenged and assured in the Retail Sub Group.
<b>Outcome 6: An outstanding experience</b>			
No challenge, assurance only	C-Mex	Service Now	New measure, mandated by Ofwat.
No challenge, assurance only	D-Mex	Service Now	New measure, mandated by Ofwat.
<b>Outcome 7: The thriving environment</b>			
Moderate and assurance	Treatment works compliance	Asset Health	Asset health has emerged an important area for customers; mandated by Ofwat.
Refinement and assurance	Improvements in WFD criteria	Environment	The National Environment Programme (WINEP) obligations should meet the company's commitments under the Water Framework Directive.
Refinement and assurance	Satisfactory sludge use and disposal	Environment	Alignment with EPA sludge PC; Our challenge was to have a specific PC on Bio-resources price control.
Strong and assurance	Biodiversity	Environment	Important to customers, our challenge was to have a stretching target and a strong ODI to reflect customers' views and to incentivise outperformance.
<b>Outcome 8: A positive difference</b>			
Moderate and assurance	Inspiring our customers to use water wisely	Community	A strong theme from customer research is the need for more focused education. Our challenge moved the company from an output to an outcome based measure.
<b>Outcome 9: The company you can trust</b>			
No challenge, assurance only	Community dividend	Community	The Water Forum welcomed the proposed community dividend.



## Outcome 2: Good to drink

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**Water-quality complaints. The number of consumer complaints about the appearance, taste or odour of their drinking water quality.**

Most of the complaints about appearance, taste and odour relate in the case of Severn Trent to discoloured water, with no public health consequences. The company's performance has been improving but, when compared across the country as a whole, is average.

The sub group looked closely at the data, which shows a far higher rate of discolouration complaints for companies whose water originates in the West, compared to those in the South and East. This is said to relate to underlying hydrology and sources rich in manganese.

The company under challenge has agreed to a target for a significant improvement to no more than 9,500 complaints, which will be both at least average for all companies, but at frontier performance for those in the West.

## Outcome 3: Water always there

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**Speed of response to visible leaks. The time taken to fix customer reported significant visible leaks on Severn Trent's network.**

The company has a PR14 commitment to respond to visible leaks and to resolve them within 24 hours. This has proved to be very challenging, in part because of the unanticipated difficulty, for some leaks, of acquiring permission to undertake roadworks, or other remediation, at such short notice. The company initially proposed to remove this PC, arguing that it would be subsumed by both a much more ambitious overall leakage reduction target, and other PCs of relevance. We challenged the company that customers' motivation to manage water well is linked to their sense of the quality of stewardship being exhibited by the company, and that the most obvious aspect of this to customers was how the company responds to a visible leak. We also argued that dropping a PC that the company had committed to, but was failing to deliver, was not reasonable.

The company reconsidered and has retained this as an area of performance. We have agreed an ambitious target for improvement, but one which recognises that logistical issues preclude an arbitrary time to resolution of 24 hours.

**Persistent low pressure. The number of low-pressure days experienced by properties which have exceeded the persistent low-pressure threshold.**

The company, as is typical, has a very small number of customers registered as at risk of persistent low pressure. In its customer engagement, it became clear that the perception of persistent low pressure is one held by a far higher percentage of customers than those formally registered. Whilst the sub group acknowledged that a perception of low pressure is not always accompanied by a true pressure shortfall, the measure used in PR14 did not adequately describe the issue. The company agreed to adopt a new metric, in which it will be incentivised to reduce the number of low-pressure days experienced by customers and, in addition, to introduce a new measure on customer complaints in this area.



**Resolution of low pressure complaints. The percentage of customers who report a low pressure or poor supply issue and have their complaint resolved without having to contact us for a second time.**

We challenged the company to give greater priority to the management of complaints and perceptions concerning the experience of low water pressure for customers. A focus of this metric is that advice, guidance and practical steps following a complaint lead to “right first time” resolution.

## **Outcome 4: Wastewater safely taken away**

**Sewer blockages. Short definition: The total number of sewer blockages on Severn Trent’s sewer network (including sewers transferred in 2011) reported on a financial year basis.**

Sewer flooding continues to be a very important area for customers. A large amount of work is ongoing to reduce sewer blockages and this includes education campaigns to prevent the disposal of fats, wipes and other products into the sewer system. The company was keen on replacing a blockage indicator with one around the level of education provided, which would be a process-based indicator but the sub group argued for retaining an output measure on the number of blockages. This was because there are many operational, engineering and monitoring activities that influence the frequency of blockages (see relevant driver diagram) and it would be inappropriate to focus on just one. The group also regarded that this was an important area for technical innovation across the business, as well as effective educational campaigns.

A sewer blockage PC has been retained.

**Collaborative flood resilience.**

The company, in discussion with the sub group and the Water Forum, has proposed a new measure, relating to the number of properties which will be rendered no longer at risk of flooding through collaborative action and investment, in which Severn Trent will play a significant role. Initially, this will target a group of 360 properties at risk, but a key part of this activity will be to gather intelligence and try innovations in collaboration with partners, in order to set better informed targets for AMP8 and beyond.



## Outcome 7: The thriving environment

**Biodiversity: The number of hectares of land managed using a biodiversity action plan.**

The sub group challenged the company to adopt a more ambitious target to improve the biodiversity of both land under management by the company, and by partners engaged in action associated with the action plan. This ambition was underpinned by the adoption of an agreed Willingness to Pay value, rather than a value selected from other, earlier, environmental evaluation studies. The chosen value gives a suitable incentive to perform against the commitment, without creating obvious perverse incentives (such as buying agricultural land). This resulted in an increase in the ODI proposed for biodiversity from 1.2k/hectare to 3.6k/hectare.

The company agreed to adopted more ambitious targets and a stronger incentive framework.

## Outcome 8: A positive difference

**Inspiring our customers to use water wisely. The number of people who have agreed to change their behaviour as a result of our educational activities.**

Throughout the programme of customer engagement a common theme emerged. Whenever engagement went beyond a superficial short survey, customers expressed surprise that they had not been provided with more information about the long-term challenges to meet water demand. We pressed the company to be more ambitious and specific in developing innovative interventions that would engage customers and to go beyond counting contacts towards measures which were of commitments to change behaviour.

The company responded to these challenges. The headline PC has been revised to be an output measure based on the number of people engaged that have pledged to change their behaviour. Delivery channels will include school visits with an immersive experience and the use of digital apps. New sub-measures will be reported annually to the Water Forum, which will track the impact of different engagement types, with a view to the most reliable of these sub-measures being adopted in the next AMP.





# The Water Forum's concluding views

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In the areas of the Aide Memoire where Ofwat is seeking an explicit comment from the Water Forum, we have concluded that the company has proposed an appropriate suite of outcomes, which are reflective of the areas that are most important to customers.

The company has risen to the challenge of developing driver trees for each outcome, which have been influential in identifying the most important activities that they should pursue to drive improvements in these outcomes.

The company has proposed an appropriate range of Performance Commitments that will be used to monitor its performance. It has been willing to challenge in the design and selection of those measures. This has resulted in the retention of focus on areas, such as speed in responding to visible leaks, that are a challenge for the company, whilst avoiding an unrealistically large number of PCs.

A welcome feature of the approach taken has been to focus initially on the development of frameworks and decision trees to enable transparent choices to be made on issues such as the handling of intrinsic variation, or the use where appropriate of reputational incentives.

The target adopted for each PC has been scrutinised to ensure that it is stretching, taking account of historic performance, and comparative information, including, where appropriate, a judgement on likely upper quartile performance by 2024/5. We wanted to ensure that the level of ambition was particularly significant in the areas of performance which customers identify to be of most importance to them.



In several instances, the company accepted the challenge to adopt a more stretching target than had been its initial intention. Most notably, the company had adopted greater than a 15% reduction in leakage for AMP7, but had projected more modest improvement in following AMPs. Under challenge from the sub group and the Water Forum they are now proposing an overall 50% reduction by 2045.

The company has made real efforts to broaden the scope and nature of customer engagement including being innovative in choice of methods and triangulation of results. Where necessary, the company has proposed, and the sub group has supported, a pragmatic approach to handle the, at times, very divergent outputs from

exercises such as Willingness to Pay. The sub group harbours significant doubts about the weight placed on the technique of Willingness to Pay and the results it generates as currently conducted, but has recognised that the company has made best endeavours to manage the intrinsic shortcomings of the approach.

The emerging suite of PCs and, where relevant, associated ODIs has been socialised with customers through qualitative research, and the modelled consequences of their use tested in acceptability research. They are acceptable to customers (85% of customers were supportive). The final adopted suite of Outcomes, PCs, Targets and ODIs can be seen in the [business plan](#).

The suite of final performance outcomes is consistent with customer priorities and is acceptable to them.





# Conclusion

Finally, we summarise the Water Forum's conclusions on the match between customer needs and the proposed business plan through acceptability research.

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# Our assurance

From what we have seen and read, Severn Trent has engaged effectively with its customers.

We are confident that the company really understands their priorities and that the business plan is predicated on delivering services which will meet their expectations. We are particularly pleased to see the degree of ambition in the plan, particularly in areas where Severn Trent has had weaker performance, such as interruptions to supply, but which are high priorities for customers.

To rely on our report, we know that Ofwat must be confident in our independence from Severn Trent. We have summarised here how we maintained a robust, arm's length relationship and our challenges on customer engagement, which Ofwat has put at the heart of PR19. Finally, we have briefly commented on the linkage we have seen between customer views and the main elements of the business plan.





# Our independence

The success of our process critically relied on our independence.

The Water Forum introduced independence in two main ways.

First, we wanted to have sufficient **expertise** to frame issues ourselves so that we did not rely on management to define the choices open to us for challenge. Second, we designed our **ways of working** to ensure our process was demonstrably independent of the company.

## Expertise

In light of the Ofwat brief, we recruited new members to fill skill gaps. For example, given the emphasis on our scrutiny of customer engagement, we appointed a thought leader in helping organisations listen to what really matters to customers. Dr Nick Baker has chaired the Market Research Society (MRS) think tank, The Delphi Group and been a board member of the MRS since 2014.

Similarly, we were joined by an expert in climate change, resilience and risk. Dr Steve Wade delivers consulting projects on climate projections, flood risk management and water resources planning. These specific subject matter experts were joined by two local authority professionals (Jan Britton, Chief Executive of Sandwell, and Dr Stuart Young, Executive Director of East Midlands Councils) who framed our debate in the local context.

In total, we welcomed six new independent expert members who, in combination with the formidable experience and expertise of our regulator members, provided intellectual independence and diversity of thought.

## Ways of working

Whilst we have worked very closely with Severn Trent, we have been rigorous in ensuring our relationship was at arm's length. There are many examples of this such as our private sessions, sub group discussions and ensuring that company proposals were properly evidenced.



## Evidencing our independence

Independence is intrinsically difficult to evidence. To address this, we conducted our own peer review process, which showed how the introduction of expertise has contributed independent thinking which has had a tangible impact on the business plan.

The summary of the review is in our Governance chapter and the full report is in our appendices.

## Independence summary

We were unsurprised to hear that the company found our feedback detailed, rigorous and unrelenting. Illustratively, as late as the 8<sup>th</sup> August 2018, we challenged the company to rerun its acceptability research to capture changes to the business plan.

Nonetheless, we believe our challenge has been constructive and effective. We concur with the company's view that Severn Trent customers have been provided with a much better plan as a result of our involvement and challenge. In large part, that is due to the company's thoughtful and non-defensive response to challenge. It has welcomed different perspectives and embraced new perspectives where they have added value to the customer.



# Our challenge on customer engagement

The Water Forum has had a significant impact on the way the company engaged with its customers and stakeholders.

We made two main challenges to the company.

Firstly, we challenged the company to develop a strategic framework for all research and insight development. The company's resulting framework helped to gather all the questions to be addressed at the start. The research programme was then designed to sequence projects to answer those questions both effectively and efficiently.

We proposed a framework predicated on a challenge as to whether all customer needs are equal. The resulting '[hierarchy of needs](#)<sup>6</sup>', helps to distinguish between different kinds of customer needs including constructs that acknowledge customer's attitudes to, and affinity with, water.

The company accepted the challenge and built on it by improving the framework, introducing further detail into the construct that increased its usefulness. The framework has been invaluable in ensuring that every piece of work had an explicit role in building knowledge and avoiding wasteful repetition. As a result, the learning has been cumulative, highly focused and relevant to the issues addressed in the business plan.

The second main challenge was in the actual implementation of the research programme. This involved a large number of challenges ranging from sampling parameters to new techniques such as social media scraping. An example was working harder to get the views of customers who were not available during the field-work for Willingness to Pay; our hypothesis was that they might have different views to those who were more accessible. This turned out to be the case and previously ignored 'non responders' turned out to have distinctive opinions.

Virtually all of our challenges were accepted and implemented. The research programme scope has been proportionate; we believe that the PR19

programme offered better value for money than PR14, despite a spend that doubled to £1.4m. We observe that the quality of customer engagement has significantly improved and we are confident that the changes are permanent. Indeed, we anticipate that progress will continue to be made and our report includes a 'to do' list for future development opportunities.

## Engagement summary

A wide variety of tools have been used to assess customer priorities. The results from each have been triangulated to ensure rigour.

The quality of the work and the inferences that have been drawn from it have been independently assured. We can see a strong and well evidenced connection from the research and engagement to the priorities that are reflected in the plan. Our views are supported by the strong results from the customer acceptability testing (85%) which shows customers support the proposed plan.

<sup>6</sup>Abraham Maslow, 1943, 1967, 1987.



# Our assessment of links between customer views and the plan

We have been structured and disciplined in ensuring we could see clear linkages between customer priorities and the Severn Trent plan to deliver them.

The business plan is structured in terms of nine customer outcomes. We have scrutinised and challenged each one and are now confident that each is a fair reflection of customer priorities.

## Bill impact

*Lowest possible bills* is the first outcome that the company seeks to deliver. The company is proposing a bill reduction of 5% in nominal terms and this from a bill, which is currently the lowest combined bill in the industry.

There are many drivers of this outcome but one is the Real Options approach where customers are protected from the cost of investments that, in light of unpredictable and changing circumstances, may not be required. We are satisfied by the evidence that this approach is welcomed by customers.

## Investment

The investment proposals underpin a number of the outcomes in the plan: *Good to drink, Water always there, Wastewater safely taken away and The thriving environment*. We have scrutinised closely the company proposals for investment for AMP7, especially those which form the basis of Cost Adjustment and Enhancement proposals. This scrutiny has contributed to a reduction in both the number and scale of the proposals now being submitted. The remaining proposals focus on three principle areas; Resilience of long term water supply; Environmental improvements and enhanced Security.



Our assessment of links between customer views and the plan

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For each of these areas, we have challenged the evidence of the need for investment, and the extent to which there is a direct link to evidence of customer support. We have ensured that a wide range of options were examined and have sought assurances, including through access to expert external assurance, that an optimal proposal was being submitted. Finally, we have insisted that customers are protected should a scheme not proceed, or be conducted at a lower cost.

Late in the process, the company suggested an innovative approach for some proposed investments, where new relevant evidence or guidance is anticipated during the next few years. We rapidly undertook scrutiny of the “Real Options” approach and the specific proposals being put forward.

We challenged the company to conduct new specific deliberative research to gauge customer reaction to this approach, and the potential change to their bill if all of the options were triggered.

At our last meeting, armed with this research, we were able to support the inclusion of this approach in the business plan. The result is a lower initial scale of investment than had been envisaged, with a lower initial bill, but with a robust series of triggers, each with appropriate governance, should new evidence require further 'spade ready' schemes to be initiated.

All of this being in the context that the company has confirmed its commitment to deliver on its statutory obligations, relating to the environment and drinking water quality, which are so important to its customers.

## Retail

The business plan considers the retail experience under *A service for everyone*. However, for many customers it will be their only contact with the company and so influences broad perceptions of all of the services provided.

As the C-Mex and D-Mex measures are still under development we focused our scrutiny on the company proposals for Affordability and Vulnerability.



Our assessment of links between customer views and the plan

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## Affordability

Proposals on how to support customers struggling with affordability are clearly based in research that we have read and in some cases attended.

For example, as a direct result of customer feedback, there will be a more flexible approach to the social tariff scheme. Along with customer acceptance of a higher level of cross subsidy, this will result in many more customers receiving help than at present.

## Vulnerability

The company has sensitively evolved its approach as a result of challenge from the Water Forum and evidence from customer engagement. Innovative work, which has used both operational data and research, including with those who have experienced a service failure, has led to far greater understanding of customer needs and the development of appropriate responses. These have recently been refined following the Freeze Thaw event and the subsequent heatwave.

We are confident that the company has a much better understanding of how it can help customers and how it can work with others in the community to support those who need it.

## Trust

There are two outcomes in the plan, which relate to trust. The company you can trust is the most obvious but we have seen in many research projects how *A positive difference (in the community)* will motivate trust.

The Water Forum continually reflected on the nature of trust. Our interest was partly triggered by the company's strategic vision 'to be the most trusted water company' and partly by the Ofwat campaign #trustinwater. Whilst trust levels for Severn Trent are high (70% in the most recent results), we discussed how the company could continually demonstrate its commitment to all stakeholders. We were encouraged by customers' response to the Community Dividend proposal and note they are particularly motivated by involvement; the Advisory Board that determines how resources are allocated will be important to establish credibility. We recognise this is an innovative proposal that reflects the top of the hierarchy of needs.



# Our assessment of measures of Severn Trent's performance

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The company has proposed an appropriate suite of outcomes which are reflective of the areas that are most important to customers.

The company has risen to the challenge of developing flow charts called "driver trees" for each outcome, which have been influential in identifying the more important activities to drive improvement in these outcomes. Combining this with the development of frameworks for each Performance Commitment has enabled transparent choices to be made on issues such as the handling of intrinsic variation or the use, where appropriate, of reputational incentives.

The company has proposed an appropriate range of Performance Commitments that will be used to monitor their performance. The target adopted for each has been scrutinised to ensure it is stretching and taking account of historic performance, comparative information including, where appropriate, a judgement on likely Upper Quartile performance by 2024/5.

In several instances, the company accepted the challenge to adopt a more stretching target than had been their initial intention.

For example, the company had adopted a 15% reduction in leakage for AMP7, but had projected more modest improvement in following AMPs. It is now proposing an overall 50% reduction by 2045. The Water Forum questioned whether the company should be able to earn rewards for improving performance where they operate under legislation. An example would be improvements in numbers of pollution incidents. Ultimately, the Forum accepted that the company has proposed solutions it believes to be in the best interests of its customers.

The company has made real efforts to broaden the scope and nature of customer engagement, including being innovative in the choice of methods and synthesis of results. The emerging suite of Performance Commitments and, where relevant, associated Outcome Delivery Incentives, has been socialised with customers through qualitative research and the modelled consequences of their use tested in acceptability research.



# Summary

The most important verdict is from customers. We are pleased to see that, after robust acceptability testing research, 85% of customers find the bills implied by the plan acceptable.

The Severn Trent business plan has been designed with a clear line of sight to the customer informed by a strong customer engagement programme.

We have challenged the company with detail and rigour. It is to the company's credit that its response has been thoughtful, constructive and non-defensive. We believe that the business plan has been strengthened by this process.





# Appendices

To make it easier for the reader to follow the flow of the discussion, we have a series of appendices. These are designed to stop the reader being distracted by detail, but to enable them to drill down where they would like more information. For example, all of our challenge logs are in the appendices and we have highlighted the most significant challenges only in the chapters.

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# Report and Assurance Statements



# Purpose and context

Having reflected on the lessons learned from the role played by the Customer Challenge Group (CCG) during PR14, both the Severn Trent and the CCG, led by its new independent chair, decided on an evolved approach for PR19.

This approach has been reinforced as the Ofwat PR19 Methodology has itself evolved.

For PR19, the CCG (known locally as the Water Forum) adopted a collaborative challenge approach with Severn Trent. This meant that members of the Water Forum worked closely with Severn Trent personnel to provide informed challenges earlier in the process, leading to significant shifts in the way the company developed its approach to customer engagement and made investment decisions within the business plan. The Water Forum played a greater role in ensuring the establishment, through co-design, of an overall plan for the conduct of the PR process. It pressed for, and challenged, the development of strategic approaches, and frameworks to guide the work; and in most instances Severn Trent responded positively to these requests.

This co-production between the Water Forum and Severn Trent led to more added value from the process, but carried an inherent risk that the Forum's independence could be diluted.

In order to provide assurance that the Water Forum and members of its sub groups had retained the necessary level of independence, and provide a view of how effective the governance of the Water Forum has been throughout the development of Severn Trent's 2020–25 Business Plan, the Water Forum has built into the process its own challenge mechanism. The outcome of the process is this report, which sets out the review methodology and provides an assurance statement of the level of independence maintained by the Water Forum.



# Methodology

Once the Water Forum had provided significant challenge to the company and the majority of PR19 information had been presented, an assurance day was held to review the draft chapters of the Water Forum report. Using the draft chapters to identify key lines of enquiry, sub group leaders were interviewed to identify examples of good practice and positive impact of challenge, as well as exploring how the sub groups had worked with each other and the company throughout the process.

This peer review was conducted by two members of the Water Forum who were senior leaders in local government, both with a vast experience in governance:

- Jan Britton, Chief Executive of Sandwell Metropolitan Borough Council on behalf of the West Midlands Combined Authority
- Stuart Young, Executive Director, East Midlands Councils

Both Jan and Stuart had participated in discussions at the Water Forum, but neither were members of the sub groups. Therefore, they were able to provide a level of independent challenge to the sub group leads.

Also in attendance for all interviews were Gill Barr, Chair of the Water Forum, and Professor Bernard Crump of the Consumer Council for Water (CCWater). This enabled the peer reviewers to test the link between the work of the sub groups and the overall approach to governance by the Forum.

Although held at the London offices of Severn Trent, no officers of the company were present during the peer review.

The peer review focused on key themes for each sub group and tested the overall governance approach along the following areas:

- Methodology of challenges made.
- Working together as a sub group and with the company, including dealing with conflict.
- Impact of challenges on the business plan.
- Understanding what went well to build best practice in the future.
- Identifying what didn't work well and ideas on how to resolve this in the future.

This report sets out the findings and conclusions of the peer review process. As well as an overarching assurance statement, the report

contains a separate section on the work of each sub group. This includes commentary and examples of evidence to support the assurance statement.

It should be noted that this is the start of the assurance process conducted by the Water Forum. Once the Water Forum report has been finalised, there will be an in-depth debrief of the work of the Water Forum, and its engagement with Severn Trent to capture best practice and inform future approaches for CCGs.

The Water Forum met regularly throughout the PR19 process. The chair, in consultation with a cohort of members who were providing continuity from the work during PR14, made proposals to Severn Trent for the recruitment of new members with specific expertise in areas of relevance to the work at hand, and Severn Trent welcomed this and supported these appointments. To make optimal use of the time and expertise, the Water Forum agreed the establishment of four key sub groups, each chaired by one of the appointed subject matter experts. During this assurance process, the chairs and colleague sub group members were interviewed, and what follows summarises the findings.



# Customer Engagement

The work of the Customer Engagement Group impacted on the work of the Water Forum as a whole. Therefore, it was important for the group to work closely with the company to ensure it listened to its customers effectively to inform its business plan.

Using the vast experience of the sub group membership, the Water Forum made a series of significant challenges to the company on its customer insight programme, arising from the fact that the company did not have a strategic framework that would then inform all customer engagement activities. It was also clear that internal capability of the company to commission research was disrupted due to staff not available due to illness and new staff not experienced with commissioning research in this sector.

Following the sub group's clear and constructive criticism on the outcomes of the company's research exercise and subsequent meeting to present the 'hierarchy of needs' approach, Severn Trent recognised the contribution that the Water Forum could make to its customer insight programme and changed the direction of its

approach. To do this, the Customer Engagement Group needed to work closely with company, calling on Dr Nick Baker, the sub group lead, to support the company's internal capability. This was welcomed by the company, particularly as the richer range of customer engagement proposed would require the procurement of new research partners who were not familiar with the industry.

It is clear that the work of this sub group has made a significant impact on the way the company designs and conducts its customer insight research, and that this change is now embedded in the way the company works. For example, not only has the company adopted the sub group's suggestion of a hierarchy of needs, but it has embraced and refined the approach. This demonstrates that the company has taken on board the challenge made by the sub group, and embedded the change in its business processes.

A further example of how the company recognises the value of the Customer Engagement Group arose when the company

decided to propose a different approach to handling uncertainty in some of its investment proposals. This change came late in the development of the business plan. The Water Forum argued that a change of this nature, following the agreed framework, should be subject to customer deliberative research. The CEO rapidly agreed, despite the pressure of time, and the established supplier arrangements allowed this to be achieved to high quality and in a timely fashion. The Water Forum felt that without the time spent on the development of the framework, this suggestion would not have been accepted so quickly, if at all.

It is also clear that the Customer Engagement Group recognises that there are still challenges for the company ahead in this area. These are set out in the Engagement chapter of the Water Forum's report, and centre on the company continuing to develop its approach to customer engagement and embedding this within its business processes. This will include securing strengthened internal capacity and capability to avoid dependency on the sub groups expertise.



## Assurance Statement

The Peer Review team questioned the sub group lead, and is assured that the work done by the sub group has been carried out in an effective and independent manner. The expertise in this field brought to the table by the sub group has made a significant difference to Severn Trent's business plan and added value to the process.

### For example:

- Adoption and development of the customer insight framework based around the hierarchy of needs.
- The way that the company recognises the importance of the framework and the impact of its application beyond the work of the Water Forum, being open to developing frameworks for other elements of business planning (e.g. PCs/ODIs).
- Readiness to carry out in-depth customer research activities to direct investment proposals, even with time and financial constraints.

The work of this sub group made a significant impact on the development of the business plan by establishing a strategic framework, which not only informed the business plan but also the challenges made by other Water Forum sub groups.



# Strategic Investment

The journey of the Investment Sub Group was very different to that of the Customer Engagement Group, in part due to the time it took the company to provide clarity on its investment proposals and the extent to which they were underpinned by customer engagement.

The Investment Sub Group took time to develop its knowledge and understanding in order to be secure in their challenge. It structured much of its challenge, around the four-step process which Ofwat itself uses in considering investment proposals.

The agenda of the sub group focused principally on major areas of proposed investment, many of which related to strategic challenges in Water Resource Planning (including leakage), Environmental requirements, Resilience and Security. Persistence was key in this workstream, as challenges were not always responded to completely by the company if at all, and the sub group had to repeatedly ask for information. An example was the need for sub group to see evidence that the proposed combination of approaches to improve water supply balance, involving both demand and supply side measures, had been optimised in respect of cost-effectiveness. The sub group became frustrated at the length of time it took for the company to respond to these challenges.

The sub group leads referred to a meeting in October 2017, which acted as the turning point in the challenge process, moving from a place of developing understanding to looking at the options. Until this point, there had been limited specificity of proposals as these were being refined by the company.

The Investment Sub Group in particular challenged the company to recognise the central importance of customer engagement and insight in its investment decision making, even when the investments were in response to a statutory requirement. The sub group's perspective, which the company came to accept, is that customers who will be paying for investment through their bills have a right to have their views heard on how such schemes might be implemented, on timing and relative priority. The Investment Sub Group insisted that the company's customer insight lead joined the meetings from November 2017 to see where customer insight had been incorporated into investment plans. The company was then able to demonstrate the understanding of customer insight and linked evidence to investment proposals and cost adjustments.



The sub group also had to agree whether some investments were in scope. The company wished to limit the scope to exceptional investments, rather than scrutiny of plans for baseline expenditure. They pointed to the lack of specific reference to baseline spend in the Ofwat Aide Memoire guidance to CCG chairs and the dynamic nature of decision making on these issues within an Asset Management Period. The counter argument is that it is hard to judge the merits of an exceptional scheme in isolation of planned baseline spending in the same area of activity. This remains an area of disagreement between Water Forum members, but a pragmatic compromise has been reached. The sub group leads have suggested that this scope should be reviewed for future work of the Water Forum.

Concerns about timely and well communicated responses to sub group challenges were escalated through the chair of the Water Forum to the company's chief executive, who was able to ensure the company was more responsive.

The company also put in place its own internal challenge mechanism to review information before it was presented to the Water Forum to provide greater clarity.

As the customer engagement work developed, and richer intelligence was gathered, the company was able to refine its investment proposals. An example is in changes in proposals relating to metering: initial research was that customer's beliefs were immutable whereas deliberative research based on the Customer Insight Framework (developed in conjunction with the Customer Engagement Group), showed that education produced advocates of metering. This insight was then included in the development of the proposals around metering investment.

The greater preparedness to embrace customer engagement has been manifest in the ready acceptance of the need for deliberative research on customer attitudes to investment in areas of uncertainty. The company is proposing material reductions to the scale of upfront investment, accompanied by a trigger mechanism to reinstate schemes were evidence emerging during the AMP supports the need. Customers are being engaged in research on this approach which the sub group will observe.

The sub group and the Water Forum felt hampered by investment plans which were initially poorly communicated. The way that this issue was dealt with is evidence of the governance process working in action – issues raised by sub group leads through the Water Forum and subsequently through the chair, leading to involvement of more senior company management to seek and respond to challenges in a constructive manner.



## Assurance Statement

By interviewing the sub group leads and reviewing the draft chapter, the Peer Review team is clear that this workstream faced a series of challenges in being able to deliver the desired outcome.

However, through the persistence and expertise of the group, as well as working within the robust overarching governance of the Water Forum, the sub group has been able to influence the company to improve the way it uses customer insight and articulates how it have used it to drive investment decisions.

The Peer Review team is satisfied that the sub group maintained a level of independence throughout the challenge process, demonstrating this by continually referring back to Ofwat's requirements.



# Retail (Affordability and Vulnerability)

The approach taken by this sub group was one of a 'coach' rather than a critic, challenging the company to look from an outside-in perspective, rather than inside-out, as well as encouraging thinking about partnerships, connecting with communities and working alongside the company to share the benefit of their experience.

The key difficulties faced by this group was a lack of understanding of its role by the company counterparts, and the delay in the availability of sufficient and appropriate customer insight to inform the company's business. After some initial frustration, in part the result of the change of personnel within the company, the sub group was able to make a significant positive impact on the way the company has designed its retail offer. As with the Investment Sub Group, this more productive relationship was as a direct result of escalation of the issue to the company management via the chair of the Water Forum.

The sub group lead views the success of the group to be the fact that the company was willing to explore new areas. An example of the positive impact made has been the way in which the expertise within the sub group, working with the Customer Engagement Group, encouraged the company to develop different personas of customers that would have varying levels of need based on the outcomes of the customer research. This understanding cut across the vulnerability and affordability pieces within the business plan, and is informing how the company should be looking at other customers to understand needs and experience.

From the work of this sub group, the company recognised that customers may move into and out of vulnerable circumstances. This is characterised by the company changing its terminology from 'vulnerable customers' to 'customers in vulnerable circumstances'. The sub group was also able to use their experience and connections to enable co-design with

representatives of various groups of customers to improve the offer, such as working with the d/Deaf Community to produce a signed video for emergencies.

As with the other sub groups, there are examples where the company has taken on board the challenge of the Retail Sub Group and adapted its approach, though there remain a small number fundamental differences between the two. An example would be the difference in perspectives on the suitability of linking donation to a charity, to the achievement of specific performance goals being sought by the company. At the time of writing, this remains an open issue.

The sub group would have liked to have seen the company conduct more pilot projects to understand the impact of new approaches before rolling out. However, there is an acceptance that the company may be limited by systems and therefore a more fundamental business change is required in order to enable more pilot projects to be undertaken.



## Assurance Statement

Having interviewed the sub group lead, the Peer Review team is confident that the challenge process has been robust and maintained independence from the company, despite the need for a close working relationship between the two.

The positive impact of the challenges put forward by this sub group are strongly linked to the work of the Customer Engagement Group, and manifest themselves in the company's greater understanding of its customers and how their needs may change over time. That the challenges have developed over time as proposals have developed and that not all of the challenges logged by the sub group have been taken on board by the company, again demonstrates that the relationship between the two bodies has retained a level of professional independence from each other.



# Performance Commitments and Outcome Delivery Incentives

waterforum

The work of this sub group depended heavily on the outcome of challenges by the other sub groups, as the development of the Performance Commitments (PCs) and Outcome Delivery Incentives (ODIs) required the rest of the company's business plan to be sufficiently developed.

Technical expertise of members of the sub group and the outcomes of the customer research group were used to design challenges made to the company across all elements of PCs/ODIs, as captured in the Challenge Log. Meeting minutes also show where there was challenge within the sub group to ensure that those posed to the company were based on customer insight, and not on specific areas of personal interest. In many instances the company responded to these challenges by the development, with the sub group of a framework to guide their action and decisions. It is recognised by the sub group that this approach came from the company learning from the work of the Customer Engagement Group.



Through its challenges to the company, the sub group was able to prevent the company dropping some performance metrics from the previous business plan to ensure a wider range of customer needs were reflected in the suite. For example, the company has retained measures around the time it takes to fix leaks, which it had proposed to remove from PR19. The sub group also challenged the company to improve the quality of metric definitions to reduce the level of interpretation that was required when assessing performance for the company's financial benefit. Through the work of the sub group, the company has been able to clearly articulate how its activities will impact outcomes for customers using 'driver trees'. The development of these driver trees and the framework supporting ODIs by the company has been a direct result of the work of the Water Forum.

The sub group used the compendium of customer insight to focus its challenges, and members were involved in the work of other sub groups to be able to link back all elements of the business plan to the PCs/ODIs. An example of how the sub group used customer insight to inform its challenges was in the development of the metric around households experiencing low water pressure. Initial research showed that customers appeared to be willing to pay surprising amounts for the avoidance of low pressure.

However, the sub group worked with the company to refine and understand the research, leading the company to recognise that the customer perception may be different from actuality. The sub group carried out triangulation incorporating research from elsewhere and anonymised benchmarking information, and the company is now able to have a more sensible metric around water pressure.

In general, the company accepted the majority of challenges put forward by the sub group, even where this required additional work to develop the suite of metrics. The draft chapter includes a number of challenges to metrics which were not agreed or where the challenge is still open, and the sub group is working to reach a conclusion on those before the submission of the business plan.

There is recognition that the work of the sub group was slow to get moving, in part due to the need to wait for the outcome of the compendium of customer insight, but also due to the lack of timely provision of information from the company at the beginning of the process. The view of the sub group lead was that this was down to both sides being new to their roles, and by escalating this issue through the agreed governance structures to improve working practices and skills, the company responded constructively and positively to challenges. The sub group lead commented that there could also have been improved links with the Retail Sub Group to challenge the Retail ODIs, and that future workstreams will need to learn from this for the next time.



## Assurance Statement

Having interviewed the sub group lead and reviewed the draft chapter, the peer reviewers are satisfied that the challenges made by this workstream have been evidence based and clearly linked to the views of the customer.

The expertise of the members of the sub group have enabled the Water Forum to provide robust challenges that have informed the working practices of the company. However, it recognises that stronger links could have been made with the Retail Sub Group on challenges to ODIs in this area. Overall, the outcome of the work of this sub group has been the development of a refined set of clearly defined metrics that give good coverage of customers' interests.



# Overall Governance Statement

During the course of the assurance process, the Peer Review team has heard reasonably consistent themes regarding the approach and experience of the sub groups.

The company and Water Forum have worked together and have learned together in a form of co-production. Through “collaborative challenge” the Water Forum has at times led the thinking of Severn Trent and is able to demonstrate evidence where it has influenced Severn Trent's activities, which has in turn led the work of the Forum in an iterative process.



Throughout the challenge process the focus of the sub group leads has been on the needs of the customer and ensuring these have been fully understood and taken on board by the company. This has been enabled by the expertise, experience and commitment of members of the Water Forum, who have been specifically recruited due to their suitability for this role. When challenged by the Peer Review team how they maintained their focus on customers, each sub group lead was able to respond to the question quickly and clearly.

All sub group leads spoke of a “slow start” and a frustration in not being able to make progress faster. However, members acknowledge that spending time to build knowledge and relationships built in quality to the result. This is typical of the co-production approach used by the Water Forum; time spent understanding the issues has culminates in a better product. Consolidating working relationships and agreeing the scope has created a solid foundation for providing robust challenge and quality outcomes. The constructive process of engagement over time has been balanced by a constant reference to the remit of the Water Forum, understanding of customers and a robustness of the challenge.

The collaborative approach did not compromise the challenges made, as evidenced by the challenge logs and fact that there were still challenges made towards the end of the process when the business plan was nearing completion.

Members also acknowledge that overall the company has been willing to engage, listen and learn throughout this process. There is good evidence of a high number of robust challenges made by the sub groups in all areas, some of which have resulted in very challenging conversations. Through the skills and expertise on the groups, the amount of work put in by sub group members and the key role played by the Chair of the Water Forum, these challenges have been dealt with professionally. The way that very senior management in the organisation have driven change in the organisation as a result of challenges raised through the Water Forum’s governance is evidence of the positive impact of the work of the Forum.

The Water Forum and Severn Trent are able to demonstrate a functional and maturing relationship. It is clear that where the sub groups found their task difficult in the beginning, this was due to a lack of understanding of their role

by the company or a lack of appreciation for the value of their input. Through the established governance mechanism and the strong leadership demonstrated by both the Chair of the Water Forum and the company’s Chief Executive, the Water Forum was able to demonstrate impact of its work and the company ensured that leads were receptive to these challenges. Governance mechanisms of the Water Forum and the design of the workstreams has meant that each member of the group has been able to challenge each other to retain independence throughout the process. The level of self-awareness of risk that independence must be maintained is demonstrated by this assurance process – by inviting an internal challenge at the end from those not involved in the sub groups, the Water Forum has added an extra level of assurance and objectivity.

The Peer Review team would like to acknowledge the role of the Chair in enabling change and addressing issues through their “hands on” approach. The way that the chair has been able to build the membership of the Forum through a tailored recruitment and selection process has meant that the sub groups were able to maintain the required distance and objectivity.



## Assurance Statement

Through interviewing all sub group leads and the Chair of the Water Forum, the Peer Review team is assured that the required level of independence has been maintained throughout the challenge process.

All members of the Forum have taken their roles extremely seriously, and demonstrated a high level of commitment to ensuring that customer insight has driven the way Severn Trent has developed its business plan.

The value of the Water Forum's "collaborative challenge" approach is demonstrated by the significant improvements in the way the company has used appropriate customer insight and articulated how this has influenced their business decisions. It is also demonstrated by the way the company responded to the challenges made, and ensured senior representation on sub groups were receptive to challenges and influenced business practices back in the company.



# Lessons learned

The Water Forum is planning on conducting an in depth debrief at the conclusion of the PR19 process. This will be used to inform future challenge activities and shared with Ofwat and with other Customer Challenge Groups to improve national practices.

In advance of this activity, members of the Water Forum interviews as part of the assurance process all identified where there were improvements in their processes that should be learned from in future exercises:

- All members of sub groups, both Water Forum and company representatives, should be clear on the role and scope of the sub group, so that the required information can be presented to inform challenges.
  - Planning of the approach from the beginning was useful to drive activity of the Forum; however, this needs to take account of the time required for the company to develop its proposals and for sub groups to develop their knowledge and understanding of the business.
  - To mitigate against a period of 'mobilisation, demobilisation and then mobilisation', the company and/or the Water Forum should look to retrain the skills, knowledge and experience of the current Forum membership to ensure the most effective use of resources for PR24.
- Papers and information presented by the company should be reviewed in advance, to ensure quality and clarity and avoid the use of unnecessary technical jargon.
  - The company needs to ensure that, from the start, it has senior representatives on sub groups that are receptive to challenges and can influence business practices.
  - In order to have the maximum positive impact, participation in sub groups requires a significant commitment from experienced and skilled people. This raises two questions. Firstly, in what ways will it be evident to those who have been generous with their time that their efforts have been given appropriate weight in Ofwat's consideration of the business plan and the accompanying Water Forum report? Secondly, if, as seems inevitable, the scale of commitment to being an active member of a Water Forum increases, how will this be resourced without drawing into question the independence of those involved? We would venture to suggest that this review is at least one model where this independence can be assessed and assured.



# Challenge Log

All 396 challenges the Water Forum made to the company are included in this section. At the top of each page is a navigation bar that shows the reader which part of the challenge log they are looking at.

The main challenge log contains the challenges that were made at each main Water Forum meeting.

The other logs are the challenges that arose from the sub group meetings. We have split each sub group log into two parts. Firstly, the reader will see the important challenges we have discussed in our report. These are followed by a full list of every challenge raised over the two years in the sub groups.

## Main Water Forum challenge log

Membership	Initials
Water Forum	WF
Customer Challenge Group	CCG
Gill Barr	GB
Nick Baker	NB
Jan Britton	JB
Richard Butler	RB
Ian Butterfield	IB
Rish Chandarana	RC
Bernard Crump	BC
Bill Darbyshire	BD
Gemma Domican	GD
Karen McArthur	KMc
Paul Quinn	PQ
Steven Wade	SW
Stuart Young	SY

No	Challenge	Raised by	Date raised	Company response	Open/Closed
1	The company should clarify how it had interpreted the ambiguity around the incentive rates on five of the company's performance commitments.	WF	Mar-16	Severn Trent confirmed that its business plan had proposed that the whole AMP incentive rate should be awarded, irrespective of the year of delivery. The information supplied by the company was approved and validated by Paul Quinn.	Closed
2	The company should seek to demonstrate that there is a link between its strategic framework and its business plan, with a clear understanding of trust, community and 'to serve'.	GB	Apr-16	Severn Trent agreed that it would review planned research programme in light of this challenge, and to focus at an outcomes level. Severn Trent agreed to develop an alternative approach to strategic research. The research framework has a clear link to the business plan. This is evident in the narrative and is reflected in the Water Forum report.	Closed
3	The company should review its processes to ensure that members have sufficient time to consider confidential information during the PR19 process	WF	Jun-16	Severn Trent agreed to review arrangements for sharing price sensitive information with WF members. NDA in place for all members . It was agreed with members that sufficient time would be given that slide decks would be sent one week in advance of meetings to allow sufficient time for review of material.	Closed

## Main Water Forum challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
4	The company should explain how it planned to communicate the impact on bills of its outperformance in 2015-16 to customers.	BC	Jun-16	Severn Trent agreed to respond separately on this point to Bernard Crump who would report back to the Water Forum. The information supplied by the company was approved and validated by Paul Quinn.	Closed
5	The company should provide further detail on its improvement plans in areas where it had failed to achieve its performance commitments during 2015-16.	WF	Jun-16	Severn Trent agreed to provide agenda item and discussion on 'red' performance, with action plans for improvement. This was provided at the September 2016 meeting. The update was noted by members. The WF requested more detailed information about how Severn Trent proposed to bridge the shortfall in performance in relation to carbon emissions (water). September 2016 meeting pack (all items).	Closed
6	The company should explain its plans for publishing a customer friendly version of the APR. It should also be more innovative and interactive on social media in relation to the APR report.	WF	Jun-16	Severn Trent agreed to provide the draft customer friendly version of the APR to WF members for comment. The information supplied by the company was approved and validated by Paul Quinn.	Closed
7	There were a number of challenges made by Ian Butterfield in relation to the full APR report. They were detailed in an email to Severn Trent dated 8 June	IB	Jun-16	Severn Trent stated that it had addressed the comments in the final version of the APR that was published. The information supplied by the company was approved and validated by Paul Quinn.	Closed
8	The company should consider recutting its 'what matters to customers' research to create a clearer hierarchy of customers' needs. This hierarchy would help to add structure and definition to future research and in particular target its willingness to pay and other valuations research.	WF	Sep-16	Severn Trent presented an outline of its market research plan and process, which it said was the company's attempt to respond to the initial challenge from the Chair (see above). Severn Trent was supportive of the concept of a framework for research. We have since provided updates on hierarchy of needs in September and October and also in the process of finalising the customer insight report (customer compendium).	Closed
9	The company should consider how it would involve broader stakeholders in the development of the business plan, and whether or not they should be invited to join sub-groups	WF	Sep-16	Severn Trent agreed to consider potential options and to develop its approach to broader stakeholder engagement. The company's approach to broader stakeholder engagement was outlined to WF members at the July 2017 meeting.	Closed

## Main Water Forum challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
10	The company should give greater prominence for the concept of 'customer first' and use more constructive language within the working principles	WF	Sep-16	Severn Trent agreed to revised the draft principles of working in time for the November 2016 meeting. The revised principles were presented to and agreed by WF members at the November 2016 meeting.	Closed
11	The company should ensure that where a prioritisation exercise had been undertaken as part of the qualitative research (which the company had undertaken to start the PR19 process), that this should not be interpreted as a quantified outcome. In addition, further insight could be drawn from the research by restructuring the outcome.	WF	Sep-16	Severn Trent noted the point about quantified conclusions. It also agreed to consider options to restructure the outcome of research. The whole approach to research has now been updated, refer to Appendix A1: Engaging Customers.	Closed
12	The company should not close the door to external perspectives in developing its strategic challenges and should make sure that the process around the challenges allowed scope for additional challenges to be considered.	WF	Nov-16	Severn Trent agreed with this approach. At the WF meeting in February 2017 Severn Trent explained that it had changed the wording in 'Shaping our Future' to call for additional challenges. It outlined its approach to consulting on this, not only with informed stakeholders but also through an open invitation. The strategic challenges approach has now been updated since the publication of shaping out future. Additional information from Stakeholder engagement team to show the journey of stakeholder engagement and how this links to the UMEs (strategic investments) was made available.	Closed
13	The company should explain in further detail how it had reached the proposed shortlist of strategic challenges that were presented to the WF at the November 2016 meeting.	WF	Nov-16	Severn Trent noted the point about quantified conclusions. It also agreed to consider options to restructure the outcome of research. The whole approach to research has now been updated, refer to Appendix A1: Engaging Customers.	Closed
14	The company should consider opportunities provided by the digital and IT revolution, and by working in partnership, to help tackle strategic challenges.	WF	Nov-16	Severn Trent noted the point about quantified conclusions. It also agreed to consider options to restructure the outcome of research. The whole approach to research has now been updated, refer to A1 Appendix: Engaging Customers.	Closed
15	The company should avoid segregating strategic challenges into separate stakeholder discussions.	WF	Nov-16	Severn Trent noted the point about quantified conclusions. It also agreed to consider options to restructure the outcome of research. The whole approach to research has now been updated, refer to A1 Appendix: Engaging Customers.	Closed

## Main Water Forum challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
16	The company should develop a strategic framework for market research and customer insight, with a clear rationale for the chosen approach and research tools used.	WF	Nov-16	Severn Trent agreed that it would develop a programme of work to target the key customer outcome of building a reservoir of trust, from customers of today and tomorrow. At the November meeting it set out an initial hierarchy of customer needs. It proposed to measure satisfaction and dissatisfaction for each level of the hierarchy. Severn Trent agreed to apply the research framework to the business plan, and this would lead to the development of research packages. The sub group has now had a close look at all other pieces of work to challenge and this is noted in the minutes.	Closed
17	The company should be mindful of the potential for 'gaming' in relation to ODIs.	IB	Feb-17	Severn Trent's view is that ODIs should be considered in the round and that there should be a fair balance between penalties and rewards overall, backed by evidence of customer support. The company will only claim a reward if there is a step change in performance.	Closed
18	The company should make sure that Forum members are involved at an early stage when developing its engagement with customers and other stakeholders (this challenge was made in relation to plans for stakeholder workshops on strategic challenges). Severn Trent should also show the link between the results of the workshops and the customer research.	WF	Feb-17	Severn Trent agreed to produce an outline of the process, demonstrating the link between stakeholder feedback on the company's strategic challenges and the company's wider research. Water Forum members attended the shaping our future workshops and outputs from all workshops were shared with the attendees and the Water Forum. The outputs were used to inform customer research and have been discussed at sub group level.	Closed
19	The company should include customers who have no previous experience or awareness of an issue in its research, and also include issues that may be important to customers both consciously and unconsciously.	WF	Feb-17	Severn Trent agreed to provide further proposals on the definition of customers. This would be cited in future slides for the full meetings and discussed in detail in the sub groups. This has been done in the conscious/unconscious, customer needs research & strategic challenges.	Closed
20	The company should consider a broad definition of 'customer' - including for example non-regulated customers and non bill payers. This may be more appropriate and more innovative	WF	Feb-17	Severn Trent agreed to provide further proposals on the definition of customers. We have taken this on board with our sampling approach, speaking to bill payers & non bill payers, current & future customers.	Closed

## Main Water Forum challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
21	The company should explain how it will make a judgement once we have all of the information and customer research, and on what basis. The process would need to be done in a transparent way.	WF	Feb-17	ST has triangulated the insight from the programme in the A1 Appendix: Engaging Customers which has been used by the company and the WF to challenge on how customers have shaped the plan. This has been pulled together as part of the Appendix A1: Engaging Customers which is being used by the company and the sub groups to inform options and choices.	Closed
22	The company should give further thought as to the way in which environmental improvements are considered within the hierarchy of needs c.onstruct	WF	Feb-17	Severn Trent agreed that to help try to address the challenge the Forum's environmental representatives would join the market research sub-group. Ian Butterfield and Bill Darbyshire are included in the customer research sub group. The research was shaped to ensure that the environment is integral.	Closed
23	The company should clarify to WF members how regulatory bodies would undertake their roles in relation to the two Forums during this AMP and beyond (following the company's acquisition of Dee Valley Water).	WF	Jun-17	Severn Trent agreed to develop a clear process for this and to work with Bill Darbyshire in doing so. This was covered off and agreed. The Water Forum and DVW CCG will be completely separate. The Water Forum sub groups will only underpin the Water Forum and are not linked to the DVW CCG. The DVW CCG has a separate chair and is related to the Severn Trent Licence that will cover the welsh area of the business.	Closed
24	The company should consider changing the name 'Strategic Direction Statement' as this was not sufficiently open ended for what could happen - it would be customers who dictate the direction to be taken.	WF	Jun-17	This was taken on board and the name of the document was subsequently changed to the strategic priorities document. The process in the development of the strategic challenges has adapted and changed considerably . The process and journey can be provided if required. The Stakeholder team were able to offer more detailed information if required. The WF were satisfied with this.	Closed
25	The company might usefully have applied some of the granularity around its assurance to its forecasting from half year to full year results - as ODIs are a double edge sword for customers.	WF	Jun-17	Severn Trent agreed to provide a forecast in December 2017 when it comes back to the WF with a six month review. It noted however that weather and incidents can have a significant impact on performance and caution needs to be applied when providing projections to the market. An update on 2017/18 performance was sent Jan 2018 to all members who were satisfied with this.	Closed
26	The company should think hard about the impact on bills for customers when making choices about how much and when to take any rewards in the next billing period.	WF	Jun-17	Severn Trent noted that it would have to look at any bill impacts. The company committed to engage with the Water Forum, CCWater and the Severn Trent Board on this. The bills for 2017-18 would not be finalised until December 2017. An update was provided on bill smoothing and bills for 2017/18 approach. The WF were satisfied with this.	Closed

## Main Water Forum challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
27	The company should explain why it had not provided information on the detail of environmental measures (for example, different environmental targets).	WF	Jun-17	Severn Trent noted that this would be provided with the APR commentary and that the ODI reports the aggregate target level. As documented in the annual performance report.	Closed
28	The company should be aware in its use of language not to make a virtue of any benefits that came as a result of simply adopting best practice. The particular case in point was leakage, where Severn Trent was not taking a reward for leakage improvements as a result of changes in methodology.	WF	Jun-17	Noted - this approach is always taken in our annual reporting. This is documented in the year end documents that can be found on the website.	Closed
29	The company should make clearer what it was doing to improve service to customers (and the SIM score).	WF	Jun-17	Severn Trent noted that they have a focussed SIM improvement plan and shared its current complaints performance and action plan in the October 17 Water Forum pack.	Closed
30	The company should consider the role customer engagement could have in its assurance process.	WF	Jun-17	Severn Trent noted that the company had undertaken research with customers on data last year as part of the engagement around APR.	Closed
31	The company should address the fact that its research programme did not include behavioural economics or more innovative way to explore revealed preference - particularly in relation to views on resilience.	GB	Jun-17	Severn Trent responded that it was not included on the research plan at that time because the company was still considering its approach to this kind of research. The research team did not include this type of research. Further explanation of this was cited in the A1 Appendix: Engaging Customers, and recommendations also cited in the Water Forum report.	Closed
32	The company should ensure that vulnerable customers are included in any immersive research.	WF	Jun-17	Severn Trent agree that getting input and insight from our customers in vulnerable circumstances is vital. We have specific immersive research in place to gain input from this group of customers for how we can best support their needs, whether financial or service. This has included obtaining insights from vulnerable customers and will be shown through the customer insights report that this has been taken on board. The Customer research proposals provide evidence for this. A summary of proposals including groups being covered was shared with Retail subgroup members via email in October 17. This will be evidenced through the A1 Appendix: Engaging Customers	Closed

## Main Water Forum challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
33	The company should ensure that customers are provided with information beforehand so that they have a good level of understanding (when undertaking the immersive research).	WF	Jun-17	Severn Trent agreed to involve customers in the immersive research . The deliberative research will take customers on a journey and moved from spontaneous to informed. PQ confirmed that good information was given to those that attended the research workshops. Deliberative approach was undertaken in the customer needs research and strategic challenges.	Closed
34	The company should take into account generational shifts in attitude when engaging with future customers	WF	Jun-17	The company responded to this challenge by including it in the research programme. The company engaged with future customers and this is documented in the A1 Appendix: Engaging Customers.	Closed
35	The company should set out a clear definition of what it means by resilience, when considering emerging challenges facing the company. Resilience is not a word that means a great deal to customers.	WF	Jun-17	Severn Trent agreed to provide a clear definition of what is meant by resilience. This may well be informed by the draft methodology. This was addressed at the Water Forum. Deliberative research on resilience has taken place. We looked n many different ways in strategic challenges and customer needs research. We were very clear on what type of resilience was talked about.	Closed
36	The company should confirm whether there was a PR19 plan for vulnerable customers (and if so where the company felt it was on the plan). Severn Trent should also confirm whether there were sufficient resources to move this forwards quickly.	GB	Jun-17	Severn Trent acknowledged this challenge and agreed that ahead of research with customers it would be important to have a clear view on the company's strategic thinking and ambition in this area. In relation to the resources available, the subgroup chair noted at the July 2017 meeting that the workstream now had more resources available to it. In relation to vulnerable ambition ST shared their thinking on this in the August 2017 sub group meeting and an updated version in the October Water Forum meeting along with its draft propositions.	Closed

Main Water Forum challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
37	The company should add to the segmentation issue those whose vulnerability is specific to the water industry.	WF	Jun-17	<p>Severn Trent agreed to take this challenge up with the retail sub group.</p> <p>Severn Trent have considered this in their thinking and have already included customers who require water as part of treatment for ill-health (for example dialysis treatment) and also bottled water as alternative water provision not being sufficient for customers who need to make up formula for babies. The structure of the categorisation system will be flexible to add additional requirements in the future.</p> <p>The company have added in additional need codes to those standard to the energy sector so they account for water specific needs. Scope of the categories identified shared in the July &amp; October 17 Water Forum slide packs. The company ran a workshop with vulnerability experts in November 2017 which included validating the triggers and vulnerable needs codes. The company also pulled in learning from the water/energy sector industry data share group. The needs code approach was shared with the Water Forum in January 18 for review.</p>	Closed
38	The company should focus not just on the financial aspects but on the range of vulnerability.	WF	Jun-17	<p>Severn Trent agreed to take this challenge up with the retail subgroup</p> <p>Severn Trent have two focussed vulnerable work streams: financial vulnerability and service vulnerability. Severn Trent recognise that customers may be in both areas and the two work streams are working closely together. The company shared its approach to supporting the two areas of vulnerability in the July 2017 WF and in further detail in the August 2017 retail sub group slides/meeting.</p>	Closed
39	The company should amend the WF section of the customer facing APR to make clearer that that in some areas it was being challenged by the Water Forum to improve.	GB	Jul-17	<p>Severn Trent provided revised wording that was agreed by the chair. This was evidence in an email exchange between Chair and Min Grimshaw on 1 August 2017</p>	Closed
40	The company should be more transparent in its proposed commentary for the customer facing APR by stating that it needed to make improvements around its pollution performance	IB	Jul-17	<p>Severn Trent provided revised wording that was agreed by the chair. This was evidence in an email exchange between Chair and Min Grimshaw on 1 August 2017</p>	Closed
41	The company should produce a checklist for each of the subgroups, setting out where CCG input was required as well as how the company proposed to work with the Forum to meet that requirement	GB	Jul-17	<p>Severn Trent agreed to come back to the chair with proposals. A comprehensive forward agenda is now in place for Water Forum and sub groups this also links to the CCG aide memoire.</p>	Closed

## Main Water Forum challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
42	The company should proactively engage with customers on issues that, although may initially seem technical, concern customer views on the balance of returns. The idea of 'a fair exchange of value' was a good concept that could be tested out through some of the acceptability research.	IB	Jul-17	Severn Trent noted that it supported the overall push for companies to engage more fully with customers and it would give more thought as to how to have conversations with customers about how much they feel it is acceptable for the company to make. The research programme included this challenge as part of its ongoing strategy. This is cited in the A1 Appendix: Engaging Customers	Closed
43	The company should confirm if it would undertake separate Willingness to Pay research for its proposed ODIs	WF	Jul-17	Severn Trent agreed that it would undertake a separate piece of research on ODIs but that this would not be a WTP exercise. Testing of ODI rates was included in the Choices research, in the context of incentives and penalties for the plan. This is also evidenced in the Choices research report	Closed
44	The company should take into account the fact that customers in vulnerable circumstances could find themselves in all five 'boxes' and that they were not mutually exclusive	WF	Jul-17	<p>Severn Trent stated that it had cross checked the model through its conversations with energy companies and external agencies, and was moving it forwards with other companies. Furthermore the model was being used to build up the research scope and the research itself would test the categorisation used in the model. The company also validated the categories at the vulnerable expert workshop held in November 17.</p> <p>Severn Trent notes that the five box model illustrates the register/system approach that will be used to capture the information for customers. Customers will be able to register themselves against multiple vulnerable circumstances. Severn Trent developed personas to bring to life customers who might be across multiple categories and proposals for support will take this into account.</p> <p>The final needs code model was a four box model for service vulnerability. Severn Trent shared their persona approach in the August 17 retail sub group meeting. The sub group (Karen McArthur) fed back that they liked this approach. Severn Trent shared further examples of the personas via the retail sub group in December 17 and to the main WF in January 2018.</p>	Closed
45	The company was challenged to start a mapping exercise across the five retail workstreams to look at the current situation, any overlaps and any gaps.	WF	Jul-17	Severn Trent have set up a programme governance structure for the retail plan and have undertaken a dependency and scope review and identified dependencies and addressed any potential gaps identified. This exercise will continue throughout the programme. Severn Trent shared how work stream structure aligns to Ofwat business cases and customer outcomes in October 17 Water Forum slides.	Closed

## Main Water Forum challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
46	The company should make clear on its customer needs research that the company was undertaking at this stage was to plug the gaps in the previous customer needs research. Members felt that the approach being proposed was a retrograde step compared with the hierarchy that the WF had developed	NB	Jul-17	Severn Trent stated that last time round the connection had not been made with what the company provides. Customer needs confirmed the hierarchy of needs. Previous research had not covered such a broad range of customers. The current research has taken a wide cross section of an extremely diverse range of customers.	Closed
47	The company should resolve the issue which stemmed from the order in which the research programme was being progressed. In particular, unless vulnerable groups had been defined it would be difficult to know which ones to talk to. There would be existing insight for some customer groups. The first step should be to complete a mapping exercise to identify how many people need help.	NB	Jul-17	Severn Trent agreed to map out the sequence of events with a list of activities for each of the four key areas of vulnerable customers and this would be presented to the retail and research subgroups chairs, the Forum Chair and CCWater members. Severn Trent shared propositions for service vulnerability in October Water Forum with further detail at December retail sub group. Severn Trent will share example of mapping exercise against vulnerable categories and personas in January Water Forum. We observed in the research the types of customers and the need to talk to vulnerable customers. Cross subsidy will help with how many customers we can help.	Closed
48	The company should include customers who may be eligible for a social tariff but who do not know it exists.	KMc	Jul-17	Severn Trent is in agreement that both customers who are on the social tariff and those that are not aware it exists should form part of the research. Both groups are represented and specifically recruited against this criteria in the research. Severn Trent shared the scope of the three retail research programmes with the retail sub group via email in October 17. Karen McArthur replied saying 'This is looking like a very robust programme'.	Closed
49	The company needs to provide a clear plan for the approach to triangulation and a rationale where judgement is being used.	WF	Jul-17	Severn Trent has triangulated the insight from the programme in the Appendix A1: Engaging Customers which has been used by the company and the WF to challenge on how customers have shaped the plan. This will be pulled together as part of the Appendix A1: Engaging Customers which is being used by the company and the sub groups to inform options and choices.	Closed
50	The company should update its customer centric research plan slide in order to fit the hierarchy of needs approach.	WF	Jul-17	Severn Trent agreed to update the slide to reflect the construct. Evidence included within the A1 Appendix: Engaging Customers.	Closed

## Main Water Forum challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
51	The company needs to explain how it knew that, when choosing five groups for its audience profiles and methodology, that there wasn't a group with a particular need that was not represented.	WF	Jul-17	Severn Trent agreed that it had some further work to do in July 17 including on customer mapping and that this knowledge would help the company define the methodology for the research. The company validated the need code categorisation with experts at a workshop in November 17 and also benchmarked with other organisations, including the energy sector. The company did an assessment of what customers had needs specific to the water industry and mapped the codes against the triggers to assess they were inclusive. The company reviewed the need codes against GDPR requirements to ensure they were action oriented and not unnecessarily capturing customer sensitive data. A breadth of audiences has been covered. This is cited in the A1 Appendix: Engaging Customers and A service for everyone narrative and vulnerability appendix.	Closed
52	The company should consider carefully the ways in which language would affect people's responses to questions. As a particular example the question on standpipes within the WTP research could be phrased in a number of different ways	WF	Jul-17	Severn Trent agreed that language could make a difference. It noted that it was planning to carry out research specifically on drought where it would be possible to convey the risk of drought in different ways. The company tested language & cognitive pilot testing in WTP. There is evidence in the WTP report.	Closed
53	The company was challenged to consider scope for cocreation in its research plan; social tariff research would work well, for example, not only with customers but also with debt agencies.	BC	Jul-17	Severn Trent have three co-creation workshops arranged - customer needs for comms/engagement and metering and also social tariffs - these are arranged for early December 17. Severn Trent also have set up two expert co-creation workshops for financial vulnerability (January 18) and service vulnerability (November 17) where they will co-create and proposals with experts. Paul Quinn attended the service vulnerable expert workshop and customer comms/engagement co-creation session and circulated debrief emails after. Karen McArthur and Gemma Dominican will be attending the financial vulnerability expert workshop. Gill Barr attended the metering customer co-creation workshop. We did the co-creation sessions with the right evidence.	Closed
54	The company was challenged to explain whether it had reviewed its modelling at PR14 to see how accurate or otherwise it was in terms of what was happening during this AMP.	WF	Jul-17	Severn Trent confirmed that the models did allow comparisons between the budget allowed and actual costs. The detailed information was provided to the investment subgroup meeting. Detailed information was provided at the October Water Forum and more detail has been provided to the investment sub group.	Closed

## Main Water Forum challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
55	The company should target the right people for its stakeholder engagement events - at a strategic or policy level rather than tactical or operational levels.	KMc	Jul-17	While agreeing with this point in general, Severn Trent noted that the stakeholder engagement events that were under discussion were not part of the research programme but were intended to reach a broad spectrum of customers. Organisations were contacted and then it was decided who best to attend. The WF were satisfied with this.	Closed
56	The company should ensure that its customer engagement work would make a difference - customers do not always do what they say they will do or are told to do. It might be helpful to talk to experts in customer-led immersion.	NB	Jul-17	We have ran numerous customer research workshops. Britain Thinks, an expert agency in deliberative research, have been used deliberative and the co-creation workshops. Evidenced in Customer needs and strategic challenges reports.	Closed
57	The company's customer engagement work should also take account of those customers who do not access information or engagement through social media.	WF	Jul-17	We have now included as many customers/backgrounds via many mediums. Evidence can be found in customer needs research, strategic challenges, best in class etc. The people who conducted the research were experts and advised the company on the approach.	Closed
58	The WF asked the company to (i) under the column headed 'Themes', spell out further what 'Digital Unlocked' means to operations and customers in practice and (ii) recognising there are key issues relating to engaging and supporting vulnerable customers, under the column headed 'How we will do it', include cultural / behaviour change.	IB	Oct-17	The company took this challenge and made relevant updates which the Water Forum expressed satisfaction with.	Closed
59	The WF welcomed the proposal to set up a Online Panel and challenged the company to (i) ensure that 'hard to reach' customers are included (ii) that complex issues e.g. PAYG and RCV are communicated in a way customers can understand and (iii) expressed concern over the proposed timeline for setting up the panel, asking that the proposals are moved forward quickly.	JB	Oct-17	Online panel is being set up with agency Join the Dots; being organised by the Customer Research team. This is also evidenced by the fact that the online panel is now running. We will consult Retail Sub Group on topics that emerge and evidence has been shared at every stage with the WF.	Closed
60	The WF again pressed the company on proposals for triangulation of customer research, noting that the WF had previously challenged the company to provide an explanation of how the process will work.	NB	Oct-17	Discussions took place in March main meeting and at sub group level. The Water Forum were satisfied with what was presented.	Closed

## Main Water Forum challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
61	The WF welcomed the companies proposed use of the Outcomes Framework to bring different aspects of the plan together and asked that an additional column be added to the table that shows the bill impact of the outcomes.	BC	Oct-17	Noted in the PCs/ODI's February subgroup. Evidence can be found in the sub group minutes for the PC/ODI subgroup	Closed
62	With regard to the Outcome Summary Table (slide 40), Gill Barr challenged the company to recognise that for some outcomes there will be need for significant cultural and behaviour change. Other members of the WF commented that expenditure that may be discretionary was in fact core as far as customers were concerned and asked the company to consider to (i) undertake pilots and learn from best practice (ii) and finance such expenditure through delivery of efficiencies and /or reducing cost to serve.	GB	Oct-17	Severn Trent can provide a specific agenda item on outcomes and link this to the overall narrative and messaging being pulled together by Harriet Towler. This was covered in the next agenda and the Water Forum were satisfied.	Closed
63	With regard to the companies proposals to improve the resilience of its assets to flood risk, the WF challenged the company to (i) ensure customer needs are considered as well as government requirements (ii) to consider prioritising proposals to protect assets in areas of multiple deprivation (iii) provide information on how the risks SVT face compare to other water companies and (iv) consider other resilience at the same time and therefore obtain multiple benefits cost efficiently.	SW	Oct-17	This has been addressed at the investment sub group. Resilience proposals in relation to the investment plan have been reviewed extensively. The current next steps have agreed the need and correct split of stat/ non stat schemes and further work will be done to look at costs and benefits and how this links to customer views. Discussions at sub group and main meeting level satisfied the members.	Closed
64	With regard to the proposed Wastewater and WFD programme presented to the Water Forum the company were asked to (i) express more clearly the scope of the challenge to meet WFD by 2027 (ii) give a focus to partnership working in both urban and rural areas to deliver WFD outcomes (iii) consider how it defines value gained through application of the Natural Capital approach	BD	Oct-17	This is being addressed through the investment sub group. Partnership working and catchment management proposals are being explored through the PC and ODI sub group. Cited in the sub group minutes.	Closed
65	With regard to the Water supply / demand balance and Enhancements presentation the WF expressed concern that the complex, technical information presented lack clarity, in particular slide 102 that covered various statutory and non statutory proposals together over 2 Amps. Challenges included (i) the contribution each of metering, leakage and water efficiency will make to meeting the supply / demand balance and the cost per mega litre (ii) whether some of the proposals will lead to cost exclusion proposals (iii) the bill delta for each of the proposals and (iv) the proposals for water trading, even if cost neutral, should be subject to customer engagement	RC	Oct-17	Challenges were accepted and further explanation and clarification was provided in the January main meeting. Break out group workshops were arranged to engage more with the Water Forum members on this. Feedback and further clarification was discussed in the February Investment subgroup meeting in preparation for the March main meeting. Cited in the sub group minutes	Closed

Main Water Forum challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
66	The company was challenged to pilot different interventions to support customers struggling to pay to establish the effectiveness of support mechanisms	PQ	Oct-17	Pilot payment matching scheme rolled out. Ideas also tested during co-creation session with financially vulnerable customers and also in the expert workshop held in January 18. Reviews of existing schemes also undertaken with customers and experts to identify improvement opportunities. Further trials planned before 2020. Cited in the sub group minutes	Closed
67	Although it was recognised the company were good at dealing with bad debt, they were challenged to be more ambitious.	BC	Oct-17	The challenge was reviewed at the January meeting where there was discussion regarding the overall target of 1.8% and whether this should be lower. The company have committed to target upper quartile bad debt performance. The minutes cover this and show that the level of ambition was accepted by the Forum.	Closed
68	Given the demand, the company were challenged to consider supplementing customers cross subsidy support for the social tariff with additional investment from the company.	BC	Oct-17	The challenge was accepted by the company and proposals were discussed in the December Retail subgroup. Research relating to the cross subsidy for the social tariff was carried out, including asking customers to consider whether they were more likely to contribute if the company did themselves. 67% of customers surveyed were willing to increase the customer social tariff cross subsidy from £3 to £8 without the company also contributing which was higher than expected. Therefore the company considered this to be a good cross subsidy level. The company took the decision to invest dividend money (1% of profits) in a community fund which would be going into projects overseen by an advisory board for local community schemes. The company also already contribute a charitable donation to the Severn Trent Trust Fund helping customers with water grants and other support. The company chose to reinvest realised efficiencies to set up a care and assistance team in 2016 dedicated to supporting customers in vulnerable circumstances, to the cost of c.£1m. A further update was provided once the choices research was complete. Community dividend plans were shared with the Water Forum in July 18.	Closed
69	The company should review whether behavioural research could be used more to provide further insight	GB	Jan-18	This is on the agenda as part of Participation piece on the March agenda. Update following March and the results of the choices research.	Closed
70	The company should consider the need to reach out and involve young people on the Online Panel – possible channels could be the Youth Parliament (BC).	BC	Jan-18	This has been considered and built in to how the online panel will work. Update to be provided at the March Water Forum. Confirmed that the panel is for adults only.	Closed
71	How can the Online Panel be constructed to produce insight of the same quality as deliberative research? (BC)	BC	Jan-18	The online panel has now been set up (in February 2018). An update will be provided at the March water Forum. This will be a different form of customer engagement that we have not tried before so we will need to see how this runs and then what the results show us. Evidenced by discussion based on specific topic.	Closed

## Main Water Forum challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
72	Deprivation mapping would be useful to identify areas or customers most in need of investment so the company could seek their views. Is this something the company can use to inform proposals?	SW	Jan-18	We have used the index of multiple deprivation to target customers in the "social tariffs and debt management" research, which is discussed in the relevant outcome and in the Appendix A1: Engaging Customers. We are also considering if we can use this as part of the prioritisation for investment decisions, such as the hydraulic flooding programme.	Closed
73	The company was challenged to incorporate wider customer insight to understand the vulation for low water pressure - considered as an outlier	BC	Jan-18	We are considering this as part of triangulation and this is discussed in the PC/ODI subgroup and evidenced in slides and minutes.	Closed
74	Consider whether additional research will be required to support strategic investment proposals in the context of bill impacts,	PQ	Jan-18	This needs to be reviewed in the overall acceptability piece following the choices research. This has been discussed at sub group level. This was evidenced in the Choices research results.	Closed
75	What is the approach and how will the company demonstrate ODI research in the context of Ofwat's methodology,	BC	Jan-18	This is being discussed through the sub group and was evidenced in the minutes.	Closed
76	How is the Social tariff research and, in particular, the extent of the cross subsidy being reflected in plans?	PQ	Jan-18	Awaiting choices research . The retail sub group 28/02/18 discussed that this had been delayed. The approach to social tariffs and the related PC has been discussed at sub group level. The completed choices research is required to document this further. Final evidence is the company now has cross subsidy.	Closed
77	The research shows there is a clear desire for more communication. The Forum challenged that this evidence makes it important for the company to respond. For example, the customer could be provided with a clear, simple narrative to show the link between 'you said', 'we heard' and most importantly, 'this is what we did'	IB	Jan-18	How customers have shaped the plan is included in the outcomes narrative and A1 Appendix: Engaging Customers	Closed
78	What extra does the company do to support communities or those that are struggling. How do we improve our ability to identify vulnerable customers and their needs?	KMc	Jan-18	The company have two specific proposition areas covering promotion of support and proactive identification of customers who need support in its service vulnerability propositions. The company also have specific activity within its financially vulnerable plan to identify customers using insight and analytics, including working with credit reference agencies. It will work in partnership with expert organisations that customers trust to engage on the topic. The company will also use existing touchpoints and run campaigns to promote support available and help customers identify themselves. The company will build on existing partnership relationships and also create new ones. The full challenge and debate is cited in the main report.	Closed

## Main Water Forum challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
79	Bearing in mind that some of Severn Trent Water's customers are among the most deprived index e.g. Newark, could Severn Trent work with organisations like Sutton Trust and Social Mobility Commission to reach out to those communities?	SY	Jan-18	The company took this on board and noted that it already works in partnership with housing trusts, food banks and community organisations to promote its financial vulnerability support. The company is looking to extend this partnership list and will include these specific organisations in its review. A list of these third parties is in the Water Forum report	Closed
80	How much work is the company doing with housing developers to develop initiatives	JB	Jan-18	We already work with housing developers and provide incentives in Water efficiency and other areas. The statistics show that the current incentives don't provide much benefit to promote this to developers. This needs to be updated with full details of where we work with developers. Also Cited in the A1 Appendix: Engaging Customers	Closed
81	The company should consider the economic impact that Severn Trent has on the region. How the company provides support, employment, the supply chain, and how other companies are supported.	RB	Jan-18	The company took on board this challenge and considered how best to ensure that this had been thoroughly investigated. The outcome of this has been fully explained in the business plan	Closed
82	Consider the economic advantage of visitor centres and how to get the most out of them.	KMc	Jan-18	The comms team have taken this away to investigate further. Wider customer engagement has been rolled out on social media to highlight the benefits of visiting the centres. This has been built into the narrative of the business plan.	Closed
83	The company should look to be creative with the way the outcomes/ outputs/ inputs are measured. There is a chance to be innovative in the measurement for this area of education younger generations (in relation to positive difference outcome)	KMc	Jan-18	This challenge relates specifically to the measurement of that outcome. Speak to NU and see where and how this links to PC/ODI sub group. This can be evidenced in the business plan.	Closed
84	What percentage of customers struggling to pay are represented by the five personas? ( If the company is assured that these four groups cover all of the customers, then happy with this approach)	BD	Jan-18	The company sought advice through the expert workshop held in January as to whether the four customer groups including all struggling to pay scenarios. This was resulted in an additional customer group relating to new to the country customers. This is included in the A1 Appendix: Engaging Customers	Closed
85	What does the company do to make people aware of the Severn Trent Water offer when there is a breakdown in service?	RB	Jan-18	The company already uses multiple comms channels (including website updates, social media campaigns, proactive messages) and work with customers directly and use third parties. The company propose to continue to expand and improve this service during AMP7. This is included in the A1 Appendix: Engaging Customers	Closed

## Main Water Forum challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
86	What is being done to ensure staff understand what is available and can spread through professional and personal networks?	KMc	Jan-18	The company already have plans to promote support we provide to customers in vulnerable circumstances to its employees through an internal campaign in scope of the Help When You Need It project. This will enable employees to help identify friends and family members who might need support and also give them awareness of the topic. The company is also running vulnerability awareness sessions with all its contact centre and many of its field teams. The company also propose to launch an e-learning module that will help keep the message spreading and capture new starters. Shared internally via streamline	Closed
87	Has the company thought about working more closely with third parties , particularly when there are large incidents with large numbers of customers affected, for example, what was learnt from the recent flooding that could be fed into preparation for any future such events? The company confirmed that they had reviewed channels on social media and going forwards need to further consider how to use partner organisations to re-tweet to spread the message quicker, the use of local resilience forums to help and looking now to how formalise those relationships.	RB	Jan-18	The company is always looking at how it can use networks and third parties to help customers or promote services which can help customers. This was discussed in the retail breakout group in the January Water Forum where examples of how we are already working with third parties for service and financially vulnerable customers and examples were given as well as how we plan to reach out to others such as the Red Cross. The company also works with Councils and Local Resilience Forums during incidents to help communicate with different customer groups. Cited in the A1 Appendix: Engaging Customers	Closed
88	Why has 'speed of response' has been dropped from shortlist of PCs, Can the company develop a suitable alternative keeping in context customer satisfaction	BC	Jan-18	Noted - this has been taken on board and this measure is now being re-addressed. Evidence to be worked through at sub group level - an update was provided in the March WF.	Closed
89	It was noted that the company should bring out more evidence that customers support partnership working?	GB	Jan-18	The company noted the challenge and endeavoured to present the ways in which they were working in partnerships at the next meeting. This was in the research programme and cited in the A1 Appendix: Engaging Customers	Closed
90	The company was challenged on the need for a more specific measure for the sludge price control as opposed to using the carbon measure	GD	Jan-18	This was picked up in retail at sub group level. Sub group members content with information presented.	Closed
91	Why is metric eight (green communities) just focussed on waste water?	IB	Jan-18	This was taken on board and explained at sub group level. Evidenced within the minutes and slides	Closed
92	Water Forum needs to assess the level of ambition in relation to PCs and needs more figures on this (agenda item to do this – which it was noted is covered in March)	IB	Jan-18	This was discussed in March and subsequent WF meetings. The sub group did a lot of work outside of the main meetings to make clear the information. Slides and additional information in relation to this circulated.	Closed

## Main Water Forum challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
93	The strategic investments need to be set out clearly demonstrating how customers are protected against delivery/non-delivery (– which it was noted is covered in future meetings)	RC	Jan-18	This will be addressed in all future meetings. Evidenced in minutes and slides	Closed
94	Water Quality measures –we need to ensure that the new measures are meaningful to customers. For example, do customers understand a percentage compliance?	BC	Jan-18	The transparency of PCs will be picked up through first line assurance as part of the assurance framework and is also being discussed at PC/ ODI sub group. Cited in the assurance report.	Closed
95	Consider an additional measure which targets solutions for wider flooding outside gardens	WF	Jan-18	This is something the PC/ ODI sub group have addressed in their meetings. The PCs are still being developed. We have introduced a measure on public sewer flooding. Customers tell us we should give this equal priority to flooding on roads	Closed
96	What percentage of customers struggling to pay are represented by the four personas? If the company is assured that these four groups cover all of the customers, then happy with this approach	BD	Feb-18	The company took on board this challenge and presented the information at sub group level and main meeting. WF satisfied with information presented	Closed
97	A challenge was made whether the company has the customer evidence to support each strategic investment and how this could be clearly shown. It was noted that this should be evidenced also for the retired options.	GB	Mar-18	The research programme considered this to be a useful addition. The company produced a spreadsheet to map out the engagement versus strategic investment. This was shared and received praise from the WF for its clarity.	Closed
98	How is natural capital being addressed taking on board customer feedback?	PQ	Mar-18	This was largely addressed at sub group level and then presented in detail at the main meeting un June. Noted in the minutes and the slides. WF satisfied.	Closed
99	What is the company doing in relation to cyber security considering that this is the forefront of public views?	SW	Mar-18	This information was shared in the May main meeting and at sub group level. Evidenced in minutes and slides	Closed

## Main Water Forum challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
100	The company was challenged to consider how it best captures and presents the level of customer reaction and the weighting attached to this in the customer insight appendix.	GB	Mar-18	This challenge was noted and the Research lead proposed creating a document that would be a line of sight and show weighting of customer reaction. Our view on customers' relative priority is informed by the rich evidence base from our customer insight and research programme, including the absolute WTP results, customer contact data, qualitative insight and feedback from customer facing employees. As we have triangulated the evidence for each outcome, we have considered the extent to which customers regard each performance as a priority for improvement, defining each either "low importance", "important" or "very important". Appendix A1: Engaging customers discusses our framework and triangulation approach further, and presents the customer evidence for each outcome, including the rationale for the relative priority for each performance commitment.	Closed
101	The company was challenged on if it had the customer evidence to support each strategic investment and how this could be clearly shown. It was noted that this should be evidenced also for the retired options.	GB	Mar-18	The business cases for the strategic investments include a summary of the customer evidence for each proposal, we have also included a line of sight document which highlights the evidence and how customers have shaped our proposals. For retired proposals we have included evidence within the main outcomes narrative and A1: Engaging Customers.	Closed
102	GB challenged that in the summary section of the Customer Compendium, (e.g. for strategic investments documenting the customer reaction) it was, at times, hard to gauge the level of customer reaction and the weight that was attached to this. GB also asked how the company best captures this.	GB	Mar-18	This has been incorporated in to the final version of the Appendix A1: Engaging Customers.	Closed
103	IB challenged the company on ensuring it had a robust argument for the position in the UQ range. LG noted that this was a good challenge and that the company would review the way that it explained this..	IB	May-18	The company reviewed the wording and shared it at sub group level and then at main meeting level.	Closed
104	IB challenged that the company should consider what additional information it can provide to illustrate the stretch. This was noted and the company would respond following the meeting. SA also noted that the appendices would be shared with the members for further comment.	IB	May-18	Appendices shared outlining rationale to stretch on PC targets.	Closed
105	The Water Forum challenged on the Leakage and PCC long term targets to consider more stretch in line with Government expectations.	WF	May-18	Company has accepted the challenge and will deliver a PCC target of 118MLd by 2045 and 50% leakage improvement. This has been shared with the Forum.	Closed
106	BC challenged the company in regards to low pressure complaints to explain how it would get assurance on the results.	BC	May-18	Assurance sought through third party- Jacobs. Additionally target set as %age reduction from 19/20 baseline. This has been shared with the Forum.	Closed

Main Water Forum challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
107	The company was challenged on the uncertainty proposal in relation to strategic investments. There were several comments raised in relation to this topic: The lateness of information provided by the company has not allowed the Water Forum time to review the proposal in detail. It is important that the updated position articulates all points clearly. The company will need to consider what customer evidence is available. When presenting the detailed business case, the company will need to bring to life: *Customer impact *What the trigger is for ODIs – particularly since uncertainty for climate change is not going to be resolved in the life of the plan *Show the impact on environmental obligations with clear expectation the company will deliver all obligations *The customer narrative	WF	Jun-18	The company presented further information to the Chair and Strategic Investment sub group on this topic on 18/06/18. Further information was also be provided in the following weeks. Further details on Uncertainty are noted in the main Water Forum report and in the Investments challenge log. This has been shared with the Forum.	Closed

## A. Robust, balanced and proportionate evidence base

### Challenge on establishing a strategic insight framework

Challenge	Company response
The company should develop a strategic framework for market research and customer insight, with a clear rationale for the chosen approach and research tools used.	The company agreed that it would develop a programme of work to target the key customer outcome of building a reservoir of trust, from customers of today and tomorrow. As discussed in the strategic quality section, the company has set out an initial hierarchy of customer needs, taking into account the fact that the drivers of satisfaction / dissatisfaction are different at the different levels of the hierarchy.
The company was challenged to base the hierarchy of customer needs on the insight from its research on customer priorities. The hierarchy would help to add structure and definition to the research objectives and in particular target the willingness to pay research appropriately.	The company has established a hierarchy of customer needs, based on the 2016 research on customer priorities. It then conducted a full review of the past 10 years of customer research in order to challenge and validate the hierarchy.
The company was challenged to develop a programme of work to target the key customer outcome of building a reservoir of trust, from customers of today and tomorrow.	The company has developed research packages centred on the hierarchy of needs and targeting all levels of the hierarchy from basic needs through to self-fulfilment.

### Challenge on the range of research techniques, approaches and methods

Challenge	Company response
The company should include customers who have no previous experience or awareness of an issue in its research, and also include issues that may be important to customers both consciously and unconsciously.	The company agreed that it would include both customers with experience of service failure in the research, as well as those who have not experienced service failure or who have not had recent contact with Severn Trent. Research topics will include those which customers might not have consciously considered (e.g. resilience) as well as those they might experience on a day to day basis (e.g. taste and appearance of drinking water).
The company was challenged that the research tools and techniques need to take into account the Strategic Framework, 4 box model developed as described in the Tactical Quality section. This considers whether the issue presents itself now or in the future, and what is conscious or unconscious in customer's minds, and suggests appropriate tools for each quadrant.	The company has developed an arsenal of research techniques covering each of the 4 boxes. For example, for topics such as resilience, which are both unconscious and future facing, they have used deliberative research, which builds awareness and uses active participation to get opinion. Issues such as customer service and complaints handling can be analysed using social media and customer contact data.

### Challenge on undertaking revealed preference research

Water Forum Challenge	Company response
The company was challenged to consider constructing an enhanced customer service level offering that would enable it to put a value on different aspects of service - as a revealed preference experiment. This would involve offering a segment of customers a different level of service, accompanied by different pricing. This would test whether customers would wish to sign up to a service package, with real life financial implications.	The company chose not to take this suggestion forward due to concerns about delivery feasibility of a differentiated service / price package, as well as potential concerns from customers about a differentiated level of service / pricing. Subsequent research showed that customers considered different price and service offerings inappropriate for a water company. The company considered alternative revealed preference proposals from research agencies, including a proposal to undertake a project on river pollution. Following discussion with the subgroup (who considered the proposal to be another form of stated preference) the company elected not to take this forward. The company has taken forward a proposal for avertive behaviour revealed preference research on supply interruptions. It was noted that the subgroup challenged that they do not consider this to be truly revealed preference but accepted that the approach would yield actionable insight, and an alternative valuation data point from a study which is very different from the willingness to pay valuation research. The results of this study have been used in the triangulation of valuations in order to determine the company's incentive rate for interruptions to supply.

## A. Robust, balanced and proportionate evidence base

Challenge on listening to what customers are saying, without explicitly asking them

Water Forum Challenge	Company response
The Water Forum challenged the company to use behavioural research in its programme.	The company noted that this is a fair challenge and one that it made several attempts to resolve within the research programme. Looking forward, the company recognise that behavioural research should form part of future customer engagement, and has already been utilising behavioural insight and data analysis to run more targeted campaigns (such as a direct debit nudge campaign and a water efficiency campaign). The company are also planning a trial to observe changes in water consumption when a smart meter is introduced for a group of households. Behavioural economics consultants at Frontier Economics were involved in reviewing the willingness to pay research.
The company was challenged to make use of operational data as well as the insight from research	The company has analysed contacts and complaints from customers over the past few years. This has revealed interesting insight, for example the analysis of customer complaints has revealed that low pressure is a bigger issue than the company have previously considered. This finding has then been sense checked against outputs from research sources.

Challenge on the approach to triangulation

Challenge	Company response
The company was challenged to provide a clear plan for the approach to triangulation and a rationale where judgement is being used.	The company have presented the Water Forum with their approach to triangulation. Their approach to triangulation consists in two parts, which go “hand in hand” together – the first is the “synthesis and judgment” in the Customer Insight Annex which is used for developing the performance commitments, informing targets and validating incentive rates and strategic investment proposals. The second is the triangulation of valuation data, used to set robust incentive rates and in cost benefit analysis.
The company was challenged to avoid having a positive confirmation bias in triangulation and to look at how outliers are handled and have a clear strategy for handling them	The company has commissioned independent third party assurance on the triangulation of valuation data (from Frontier Economics) and on the “Appendix A1: Engaging Customers” of customer insight (from Trinity McQueen).
The company was challenged to incorporate in-depth qualitative research in the process of triangulation.	Within the customer insight Customer Insight Annex <a href="#">[link]</a> the company have incorporated the insight from both qualitative and quantitative research. Insight from qualitative research has also been used in the validation of the outliers in the WTP results.

Challenge on getting third party assurance

Challenge	Company response
The Water Forum challenged the company to seek third party assurance in order to provide validation that the findings from the research programme have been accurately summarised and that the conclusions are valid.	The company has commissioned independent third party assurance on the “Customer Insight Annex” of customer insight (from Trinity McQueen, a research agency who have not been involved in any other aspect of the research programme). <a href="#">[link]</a>

Challenge to expand the choice of research agencies

Challenge	Company response
The Water Forum has challenged the company to expand their choice of research agencies and bring new ideas and expertise from outside the sector into the research programme.	The company has responded by tendering projects with new agencies (following challenge by the Water Forum) and commissioning key projects with agencies from outside the water sector. This has led to insight based on different lenses and approaches.

## B. Involving customers in service delivery

Challenge	Company response
<p>The company was challenged to consider the scope for co-creation in its research plan</p>	<p>The company commissioned leading research agency Britain Thinks to deliver series of co-creative sessions with customers within the insight programme. The Water Forum, members of the Severn Trent Board and Exec team were invited to attend.</p> <p>This has provided the Water Forum with first hand assurance of the quality of the engagement and buy in from senior members of the company. The use of co-creation has focused on five key areas:</p> <ul style="list-style-type: none"> <li>• Communication and engagement - to determine a series of practical recommendations for communications on the topics they were most interested in hearing about.</li> <li>• Metering - refine the metering strategy and build a communications toolkit.</li> <li>• Customer service propositions - developing and refining future propositions to test in further research</li> <li>• Helping customers who struggle - improving and promoting social tariff and assistance scheme offerings, including designing text message reminders after missed payments and testing eligibility criteria and bill discount levels.</li> <li>• Education with future customers - refining and testing education propositions with teacher.</li> </ul> <p>Where appropriate, the company used expert groups, for example, co-creative sessions were conducted with teachers in the early stages of designing the future education programme in schools.</p>
<p>The company was challenged to consider the views of stakeholders and other partner organisations</p>	<p>In 2017 the company ran a series of stakeholder workshops on the strategic investment areas and vulnerability. The company regularly engages with partner organisations such as those involved in the catchment based approach, flood authorities and local resilience forums. The company also ran two expert co-creation workshops for financial vulnerability (January 18) and service vulnerability (November 17) where they co-created assistance proposals with expert organisations. The company also ran two expert co-creation workshops for financial vulnerability (January 18) and service vulnerability (November 17) where they co-created assistance proposals with expert organisations.</p>
<p>The company was challenged to consider co-creation as an ongoing tool in the delivery of the plan</p>	<p>The company is planning to engage with customers during the delivery phase of the plan, and in particular when considering scheme feasibility and benefit valuation for the cost adjustment proposals.</p>
<p>The company was challenged to consider the Ofwat Tapped In report and how it was going to engage with customers through more active participation</p>	<p>The company arranged a session at a main Water Forum meeting to discuss customer participation. Experts in the business showcased three examples – the “leak locator” trial, the direct debit nudge campaign and the award nominated insight led water efficiency campaign. These examples were supported by a wider set of case studies which have been collated in the Customer Insight Appendix.</p>

### C. Engaging on longer term issues – including resilience

Challenge	Company response
<p>The company was challenged to consider how the environment is reflected in the hierarchy of needs and in the research</p>	<p>Engaging customers on the environment, and longer term issues that they do not consciously consider, is difficult and requires a considered approach. As part of this challenge environmental stakeholders on the Water Forum have considered how the environment is linked to the hierarchy of needs [link]. This has been reflected in the design of the deliberative research on the environment, which the chair of the Water Forum attended. She was able to witness the engagement and enthusiasm with which customers discussed quite detailed issues on the environment. This is due to the selection of an experience research agency (Britain Thinks) and the well-designed stimulus material. As participant developed their understanding of the environment they are able to participate in the debate in a more informed manner and they concern over the environmental impact of water companies increased.</p>
<p>The company was challenged on whether willingness to pay research provided adequate views on drought resilience.</p>	<p>The risk of requiring use of standpipes (in a drought) was included as a service attribute in the willingness to pay research, and the description went through thorough pilot testing. From the results, it appears that customer place low value on improving aspects of drought resilience (through their valuation of reducing the risk of needing the use standpipes) and the Water Forum challenged on whether this is due to customers concentrating on the more immediate service attributes such as leakage. The company accepted that it is hard for customers to compare a level of risk with other metrics such as leakage and therefore they discussed drought with customers in a deliberative setting, which allows respondents to be more informed and build awareness of the issue.</p>
<p>The company should set out a clear definition of what it means by resilience, when considering emerging challenges facing the company. Resilience is not a word that means a great deal to customers.</p>	<p>The company have talked to customers about resilience in a deliberative setting, using more customer friendly language.</p>
<p>The company was challenged to undertake deliberative research on how to deal with investment uncertainty</p>	<p>The Water Forum challenged the company to be mindful of the strategic insight framework and conduct deliberative research on how to deal with investment which is uncertain. The company commissioned a deliberative workshop with leading agency Britain Thinks to engage customers on the topic. The investment decisions faced by the company are not something that customers consciously consider, however through engaging materials and expert facilitation customers were able to debate the principles Severn Trent should consider and form opinions on proposed approaches. The feedback from customers shows that there is clear principled support for investing when the company has greater certainty whilst taking action to minimise the time to respond. Avoiding detrimental impact on the environment is also a key consideration for not investing in potentially unnecessary schemes</p>
<p>The company was challenged to consider how the environment is reflected in the hierarchy of needs and in the research</p>	<p>Engaging customers on the environment, and longer term issues that they do not consciously consider, is difficult and requires a considered approach. As part of this challenge environmental stakeholders on the Water Forum have considered how the environment is linked to the hierarchy of needs [link]. This has been reflected in the design of the deliberative research on the environment, which the chair of the Water Forum attended. She was able to witness the engagement and enthusiasm with which customers discussed quite detailed issues on the environment. This is due to the selection of an experience research agency (Britain Thinks) and the well-designed stimulus material. As participant developed their understanding of the environment they are able to participate in the debate in a more informed manner and they concern over the environmental impact of water companies increased.</p>
<p>The company was challenged on whether willingness to pay research provided adequate views on drought resilience.</p>	<p>The risk of requiring use of standpipes (in a drought) was included as a service attribute in the willingness to pay research, and the description went through thorough pilot testing. From the results, it appears that customer place low value on improving aspects of drought resilience (through their valuation of reducing the risk of needing the use standpipes) and the Water Forum challenged on whether this is due to customers concentrating on the more immediate service attributes such as leakage. The company accepted that it is hard for customers to compare a level of risk with other metrics such as leakage and therefore they discussed drought with customers in a deliberative setting, which allows respondents to be more informed and build awareness of the issue.</p>
<p>The company should set out a clear definition of what it means by resilience, when considering emerging challenges facing the company. Resilience is not a word that means a great deal to customers.</p>	<p>The company have talked to customers about resilience in a deliberative setting, using more customer friendly language.</p>

### D. Understanding the needs of different customers

Challenge	Company response
The company was challenged to broaden its definition of the customer to the wider consumer base and apply this in research as part of the strategic framework. The hierarchy requires further development, e.g. to include reference to the environment and to billing.	Multiple different types of customers exist within the Severn Trent customer base. The outcomes team have mapped out all the different types of customers from bill payers to those who consumer water but don't pay bills or visit our visitor centres. The research framework will map out who we are speaking to at each stage of the research and why.
The company was challenged that the decision to conduct the Willingness to Pay survey bill with payers and spouses will exclude many customers that are living with parents or renting and paying for water as part of their rental.	The recruitment criteria for the Willingness to Pay research was modified to incorporate young people who pay or contribute to their water bill through other people e.g. parents, landlords. A proportionate amount of these types of respondents was achieved in sample.
The company should consider a broad definition of 'customer' - including for example non-regulated customers and non-bill payers.	Following on from the challenge above (in relation to the Willingness to Pay research) for subsequent research projects the company has considered whether participation should be limited to bill payers (joint and sole responsibility) or broader consumers.

### E. Setting the context through the use of comparative information, with definitions that are consistent across the sector

Challenge	Company response
The company was challenged to include comparative information within the research, where relevant.	Comparative information was included in the WTP research and in the qualitative research with customers on performance commitments. It was also explored qualitatively in the customer needs deliberative research, in relation to understand the decisions participants made on prioritising service improvements.

## F. Ensuring a two-way and transparent dialogue which includes educating and informing customers

Challenge	Company response
The company should ensure that customers are provided with information beforehand so that they have a good level of understanding (when undertaking the immersive research). The company should also ensure that materials are suitable to the specific audience when undertaking immersive research.	The company agreed that the quality of information is key in the deliberative research. Water Forum members were invited to observe the research and note the engagement and understanding customers had of the materials.
The Water Forum considered that the more customers understand and are informed, the more decisions they can make. The company should ensure that customers are provided with appropriate information so that they have a good level of understanding (when undertaking the deliberative research).	The company has used deliberative research in which they used engaging and informative materials to raise awareness with customers so that they could make more informed decisions about the issues the company faces and future decisions they need to make. The company agreed that the quality of information is key in the deliberative research. Water Forum members were invited to observe the research and note the engagement and understanding customers had of the materials. The Water Forum were impressed by the information used in the deliberative research and felt it had a considerable impact on trust. The challenge it to replicate this form of engagement at scale.
The Water Forum challenged the company to respond to the desire from customers to have more communication and engagement on their water and wastewater service.	The company agreed that increased (and appropriate) communication is linked to trust and the hierarchy of customer needs – if customers trust the company they are more likely to listen and respond to engagement. Trust and engagement at the top level of the hierarchy will translate into action at the bottom level (e.g. water efficiency). It is also important to consider motive – trust can be earned by showing people that there is a motive in their own interest (for example saving water could also save them money).

## G. Engaging customers as an on-going process

Challenge	Company response
The Water Forum challenged the company to <b>set up an online panel</b> to (i) ensure that 'hard to reach' customers are included (ii) that complex issues e.g. PAYG and RCV are communicated in a way customers can understand.	The online community Tap Chat has now been launched as a direct response to Water Forum challenge. The community is intended to be the tool to continue an on-going dialogue with customers. It is clear that it will be effective at reaching a certain subset of the customer base. It is not an effective tool for reaching hard to reach customers like those that are digitally disenfranchised or those for whom comprehension of the English language is limited. The company will continue to use other off-line methodologies to reach these types of customers. Research conducted with the community will continue to use best practise for ensuring that customers can understand the materials that are presented to them. The community can also act as a test bed for understanding if materials will be understood by the wider customer base.
The Water Forum asked how the online panel can be used to produce insight of the same quality as deliberative research.	The community platform can be used to conduct both qualitative and quantitative research. The community platform will facilitate good deliberative research. Information can be shared with members with a step by step approach to ensuring that those participating in the discussion understand what is being presented to them. Discussions and opinions can be canvassed in a similar way as they are in off-line approaches.

## Customer Engagement Group challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
1	The company was challenged to base the hierarchy of needs on the insight from its research on customer priorities. The hierarchy would help to add structure and definition to the research objectives and in particular target the willingness to pay research appropriately.	NB / GB	Mar-16	We have established a hierarchy of customer needs, based on the 2016 research on customer priorities. We then conducted a full review of the past 10 years of customer research in order to challenge and validate the hierarchy.	Closed
2	The company was challenged that where a prioritisation exercise had been undertaken as part of qualitative research, it should not seek to draw quantified conclusions. In addition, further insight could be drawn from the research by restructuring the outcome.	NB / GB	Apr-16	We noted the point about quantified conclusions and also agreed to consider options to restructure the outcome of the research. The report was revised.	Closed
3	The company was challenged to develop a programme of work to target the key customer outcome of building a reservoir of trust, from customers of today and tomorrow.	NB / GB	Jun-16	We have developed research packages centered on the hierarchy of needs and targeting all levels of the hierarchy from basic needs through to self fulfilment.	Closed
4	The company was challenged to broaden its definition of the customer to the wider consumer base and apply this in research as part of the strategic framework.	NB / GB	Jun-16	Multiple different types of customers exist within the Severn Trent customer base. We have mapped out all the different types of customers from bill payers to those who consume water but don't pay bills or those who visit our visitor centres. The research framework will map out who we are speaking to at each stage of the research and why.	Closed
5	The company should review the short list of attributes for the core, stated preference WTP survey and consider substituting odour for a service attribute relating to response to major incidents. The company should consider including customer service/comms in an alternative contingent valuation trade-off exercise.	NB / GB	Jun-16	In line with the customer needs hierarchy, different attributes exist at different levels of the hierarchy. It is not appropriate to compare attributes at different levels of the hierarchy e.g. comparing safe drinking water with the service we provide at our visitor centres. Alternative research has been carried out for customer service elements of the plan.	Closed
6	The company should develop a strategic framework for market research and customer insight, with a clear rationale for the chosen approach and research tools used.	NB / GB	Jun-16	We agreed we would develop a programme of work to target the key customer outcome of building a reservoir of trust, from customers of today and tomorrow. As discussed in the strategic quality section, the company has set out an initial hierarchy of customer needs, taking into account the fact that the drivers of satisfaction / dissatisfaction are different at the different levels of the hierarchy.	Closed
7	The company were challenged that the research tools and techniques need to take into account the 4 box model developed. This considers whether the issue presents itself now or in the future, and what is conscious or unconscious in customers' minds and suggests appropriate tools for each quadrant.	NB / GB	Jun-16	The company has developed an arsenal of research techniques covering each of the 4 boxes. For example, for topics such as resilience, which are both unconscious and future facing, they have used deliberative research, which builds awareness and uses active participation to get opinions. Issues such as customer service and complaints handling can be analysed using social media and customer contact data.	Closed
8	The company was challenged to understand the drivers of trust and what effects value for money perception.	NB / GB	Sep-16	Trust is built through pursuing the best delivery in service at all levels of the hierarchy of needs. Our understanding of trust will be shaped through the research programme.	Closed

## Customer Engagement Group challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
9	The company was challenged to consider whether there is the potential for a biased interviewer to skew the WTP results. The sub group recommended that there should be a limit on the number of interviews completed by any one interviewer.	NB / GB	Sep-16	We have put a limit on the number of interviews any one interviewer can conduct (no more than 5% of the total sample). It was noted though that one interviewer has conducted 6% of the interviews. All other interviewers conducted no more than 5% of the interviews.	Closed
10	The company was challenged to consider using a MaxDiff approach in the WTP survey. This is because ranking first and second choice out of a set of four is easy, third and fourth choice less so. Within MaxDiff a respondent chooses their top and bottom priority only out of each set of four attributes. This produces more robust ranking.	NB / GB	Sep-16	Severn Trent considered this challenge and moved to the MaxDiff approach for the attribute rankings in the WTP survey.	Closed
11	The company was challenged to put references to 'Hectares' and 'Megalitres' in the WTP into context for respondents, to make these units, which may be unfamiliar, more tangible.	NB / BD	Sep-16	Megalitres was converted to litres as customers can more easily understand litres (everyday household measure used). The research design did use hectares in the attribute description but Systra feel overall customers do get a sense of the scale of improvement even if they don't understand the word hectares. Behavioural Psychology leads us to understand that customers will look at the improvement in terms of low, medium or high level of improvement and will ultimately be able to give a reasonable assessment.	Closed
12	The company was challenged to explain the sample size for the WTP survey and whether it would allow sufficient cross-breaks for robust segmentation.	NB	Nov-16	All areas of required segmentation have been documented and the sample required to be robust has been determined from that basis.	Closed
13	The company was challenged to analyse WTP results by region or at least by a rural / urban split. SYSTRA should out the postcodes of respondents into CACI Acorn.	NB	Nov-16	Systra (the research agency) plan to collect information of the geographical location of customers and will segment the data by urban/rural. Systra will also map the postcodes of respondents onto a regional map and look at the spread across the regions.	Closed
14	The company was challenged to capture vulnerability in terms of whether or not respondents are digitally disenfranchised. This is important as those not using the internet won't see Severn Trent digital communications.	NB	Nov-16	A question was included in the survey to capture this - D7: How often do you typically access the internet? Many times throughout the day, Once or twice per week, A few times per week, About once a week, Rarely/Never.	Closed
15	The company was challenged to have a representative sample in the WTP survey, to enable it to gross up the valuations to that of the whole region. The subgroup challenged that the proposed approach is only quasi- representative. We need a stratified sample.	NB	Nov-16	A quasi-random sample approach was deployed for the main survey which means it is not random in the classic sense. We have however, stratified our non-domestic sample.	Closed
16	The company was challenged to understand the views of non responders within WTP as otherwise the sampling approach could be seen to compromise findings.	BC	Nov-16	There are two types of non-responders; those that are not in when the recruiters knock on the door (out at work), but might take part had they been in and those you refuse to take part. The research agency will collect addresses of non responders in the main fieldwork and then re-contact them with a paper version of the survey. We achieved over 400 responses from the 3000 surveys sent out, and have used the results in the valuation triangulation.	Closed

## Customer Engagement Group challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
17	The company was challenged to consider re-running the core WTP survey later on in the PR19 process.	BC	Feb-17	We have undertaken a number of difference approaches to WTP - Core WTP Service failure (contextualised) WTP Non-responders WTP Deliberative WTP Budget game We have triangulated the valuations from each of these sources.	Closed
18	The company was challenged that the environmental attributes within the WTP survey need more context. For example they could state how many miles need to be improved to reach required standards and, for leakage it would be useful to put the millions of gallons lost per day into context for respondents.	Ken Willis (Peer Review)	Feb-17	It can be very difficult to explain environmental improvements in a WTP survey, however we have considered numerous approaches and checked through the pilot phases that customers understand them. In addition to the WTP research, the deliberative research will provide a more complete approach to understanding views on environmental improvements	Closed
19	The company was challenged that the proposed "Contingent Valuation survey (Budget Game)" is not contingent valuation and as such should not be referred to as one. There were a number of issues with the survey as presented (28/04/17) - order effect, satisfaction scale, absence of realistic values, results of an unrealistic bill level.	Ken Willis (Peer Review) + Subgroup members	Feb-17	The limitations described in the challenge (the order effect on attributes was eliminated, the satisfaction scale was revised, and estimated bill impact values were included) were rectified in the design stage. The results of budget game were used as another sense check to the WTP and to feed in to our understanding of customers' relative priority.	Closed
20	The company was challenged to consider how the environment is reflected in the hierarchy of needs and in the research	BD	Feb-17	Engaging customers on the environment, and longer term issues that they do not consciously consider, is difficult and requires a considered approach. As part of this challenge environmental stakeholders on the Water Forum have considered how the environment is linked to the hierarchy of needs. This has been reflected in the design of the deliberative research on the environment, which the chair of the Water Forum attended. She was able to witness the engagement and enthusiasm with which customers discussed quite detailed issues on the environment. This is due to the selection of an experience research agency (Britain Thinks) and the well-designed stimulus material. As participant developed their understanding of the environment they are able to participate in the debate in a more informed manner and they concern over the environmental impact of water companies increased.	Closed
21	The company was challenged to consider the environmental elements of the wholesale and retail side, including what customers should do in a drought. How will this be reflected in our research?	BD	Feb-17	The environment is a key theme across a number of our research projects, from our discussions with customers on supply demand options, drought resilience, biodiversity, catchment management and resilience.	Closed
22	The company was challenged to consider including additional segmentation / cross breaks in the WTP research that go further than the standard age, gender and SEG. For example technical savviness and parochiality - feelings of belonging to the locality and whether they regard water as ubiquitous or somehow different and special in their geographical area. Some other companies are doing this.	BC	Feb-17	Severn Trent does not have an existing segmentation strategy in place although it recognises that there are a number of ways to segment its information, namely age, gender, life stage, socio-economic grade, metered/non-metered, rural/urban, digitally disenfranchisement and customers in financial as well as health and well-being vulnerabilities.	Closed

## Customer Engagement Group challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
23	The company was challenged to consider that with the acquisition of Dee Valley Water, it's now even more important that Severn Trent consults with customers in Wales, which has different law and culture. Severn Trent should highlight any differences between customers living in England and Wales. The company was challenged as to whether the sample allocated to the core WTP enough to reflect the differences with our Welsh customers?	BD	Feb-17	The Wales CCG is now in place and reviewing the research plan for the Welsh licence. A fully tailored research programme was undertaken for the Welsh licenc taking into account the differences in law, culture, customers and service issues between the regions.	Closed
24	The company was challenged that the decision to survey bill payers and spouses will exclude many customers that are living with parents or renting and paying for water as part of their rental (in the WTP research).	BC	Jun-17	The recruitment criteria for the WTP research was modified to incorporate young people who pay their water bill through other people e.g. parents, landlords. There was a small proportion of these types of respondents in our achieved sample.	Closed
25	The company was challenged to consider its entire consumer base in the research. It should make sure it takes into account vulnerability, deprivation, different cultures, different attitudes to water. Vulnerability geographically as well as the different types of vulnerable customers (income, disability, health dependency on water, those who are monetarily vulnerable etc.).	BD / IB / BC	Jun-17	This challenge is similar to challenge 4. Multiple different types of customers exist within the Severn Trent customer base. We have mapped all the different types of customers from bill payers to those who consumer water but don't pay bills or visit our visitor centres. The research framework and programme will map out who we are speaking to at each stage of the research and why.	Closed
26	The company was challenged to include pollution events should be included in the service failures WTP. We should include customers who live near a polluted river and potentially consult fishing clubs and canoeists.	IB	Jun-17	The service failure WTP did not include pollution as one of the targeted areas, but instead chose to focus on flooding and disruption due to mains bursts. The company did consider a proposal from ICS to conduct a revealed preference project surrounding pollution. This has not been taken forward at this time due to timing (ICS recommended that the winter months would not be ideal for a recreation usage survey) as well as the fact the subgroup challenged this would not represent true revealed preference.	Closed
27	The company was challenged to include sewer flooding in the service failure WTP. People who have experienced flooding may value it more highly.	BD	Jun-17	We have identified 1000 properties that have experienced sewer flooding and have targeted and obtained a sample of these in our contextualised WTP. The exercise has demonstrate that a severe service failure, such as flooding, does impact on customer valuations.	Closed
28	The company was challenged to identify the needs of customers in Chester, particularly in view of any capital schemes planned in the area.	BC	Jun-17	After the licence change on the 1st July customers in Chester will be invited to join Tap Chat (our online community). We will consider what engagement is required going forward, for example as part of tariff setting. We will also continue to monitor customer satisfaction in Chester through the tracker research that Dee Valley originally commissioned in 2015/16.	Closed
29	The company was challenged to ensure the WTP has a good male representation within the younger age group	NB	Jun-17	This analysis was conducted and the younger male representation in the sample was deemed adequate	Closed

## Customer Engagement Group challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
30	The company was challenged that some of the WTP results seemed counter-intuitive, e.g. customers indicated that they would spend 100 times more per property to reduce pressure rather than improve taste and smell. The challenge is to go back and test the outcome/decisions in a qualitative way with customers to see if they fit with their priorities.	BC / NB	Jun-17	We have taken a number of opportunities throughout the process to test the core services (WTP attributes) in a qualitative way and understand why customers place importance on certain improvements. The approach to the WTP survey has been explored further in the customer needs research. The counter-intuitive results (outliers) have been explored further in the valuation triangulation process.	Closed
31	The company was challenged on whether WTP provided adequate views on drought resilience. (From the WTP results, it appears that customer place low value on improving aspects of drought resilience (through their valuation of reducing the risk of needing the use standpipes) - the company was challenged on whether this is due to customers concentrating on the more immediate service attributes such as leakage).	BD	Jun-17	Drought resilience was explored in the strategic challenges research on supply demand. We feel that deliberative research is the most appropriate technique to explore these future facing and unconscious issues - the results are presented in the Engaging customers Appendix A1	Closed
32	The company was challenged to do greater analysis around customers in vulnerable circumstances and those with low income. It was challenged to look at the difference between those who are financially vulnerable as well as those that are service vulnerable	NB	Jun-17	We have commissioned an extensive programme of in depth interviews with customers in vulnerable circumstances (from both a health and wellbeing and financial perspective), as part of the customer needs research. We have also considered how effective our current social tariff is within the social tariffs and debt management research. All our quantitative research includes a sample of customers in vulnerable circumstances and we have analysed whether their views differ from the rest of the customer base.	Closed
33	The company was challenged to conduct further analysis of the WTP results around respondents who have suffered from service failures. There are indications of some interesting findings. There is a challenge to make the sample more robust and add in another geographical location.	NB / BC	Jun-17	There was another question within the general WTP survey where people could indicate if they had suffered any form of service failure. This was in addition to the contextualised WTP in which 300 customers were targeted who had suffered a service failure. In exploring the answers to this question, we have taken the option to top on the original 96 sewer flooding victims to 112 and reanalysis of the data has taken place and the findings are now based on a more robust sample.	Closed
34	The company was challenged to come back to the group with an overview of what the WTP results mean for different customer groups. The company should consider providing more analysis on the priorities that emerged for service improvements and how this differs for people on high and low incomes	BD / IB	Jun-17	The WTP analysis highlights preferences/values for those on low incomes or those with health and well-being vulnerabilities.	Closed
35	The company was challenged to avoid having a positive confirmation bias in triangulation and to look at how outliers are handled and have a clear strategy for handling them.	BC	Jun-17	We have defined a triangulation approach and synthesised our customer insight in for each outcome and PC in Appendix A1: Engaging customers. This has included both qualitative and quantitative research. The appendix has been reviewed by a third party independent research agency to ensure no bias from the company side. Outliers in valuation have been considered and are explained in Appendix A4 Part B.	Closed
36	The company was challenged to incorporate in-depth qualitative research in the process of triangulation.	NB / BC	Jun-17	We have defined a triangulation approach and synthesised our customer insight in for each outcome and PC in Appendix A1: Engaging customers. This has included both qualitative and quantitative research. The appendix has been reviewed by a third party independent research agency to ensure no bias from the company side.	Closed
37	The company was challenged to include comparative information within the research, where relevant.	BC	Jun-17	Comparative information was included in the WTP research and in the qualitative research with customers on performance commitments. It was also explored qualitatively in the customer needs deliberative research, in relation to understand the decisions participants made on prioritising service improvements.	Closed

## Customer Engagement Group challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
38	The company was challenged to pressure test the triangulation outputs with customers and against the starting point of the hierarchy of needs.	NB	Jun-17	The hierarchy of needs and the results of the full customer insight programme, including triangulation of the evidence, will be used to determine customer priorities for the App1 data table. Where different projects have revealed inconsistencies (such as the relative priority of reducing mains bursts) we have explored these further through our online community Tap Chat.	Closed
39	The company was challenged, in the context of the supply-demand research, to retain some of the interconnectivity present in the PR14 sliders approach.	NB / BC	Jun-17	Supply-demand has been explored in a series of deliberative workshops rather than re-building the PR14 "sliders" tool. We took this decision after careful consideration of customer feedback on the tool, and bearing in mind our strategic insight framework which indicates that deliberative research is a more appropriate technique to discuss this topic with customers.	Closed
40	The company was challenged to consider further research to explore whether customers considered the incremental improvement for specific attributes	BC	Jun-17	We have explored some of the WTP results within the "Customer needs" project. We presented customers with a series of information and explored to what extent they considered to the service attribute, the amount of improvement or their personal experience in their decision making. This gives us some qualitative insight into how customers consider and make such decisions. What drives such decisions was also explored as part of the Choices research.	Closed
41	The company was challenged to provide commentary in the report on how each set of results has been derived in the report and re-issue draft report	NB / BC / IB	Jul-17	The report was clarified and finalised including the non responders WTP and deliberative WTP results and re-issued.	Closed
42	The company was challenged to consider the way in which the WTP data will be used in the planning process, in particular for those attributes where the unitisation drives very high values.	NB / BC / IB	Jul-17	This has been picked up through the PC & ODI sub group who have triangulated the valuations and developed a process to deal with outlier values. Qualitative evidence has also been included in the discussions on which attributes are outliers, as well as comparison with PR14 valuations and other water companies.	Closed
43	The company was challenged to review the WTP results for low pressure, water flow, pollution incidents and biodiversity and provide assurances on robustness and validity.	NB / BC / IB	Jul-17	SYSTRA have re-checked calculations and are satisfied that the reported values are correct. Further consideration has been picked up through the PC & ODI sub group who have triangulated the valuations and developed a process to deal with outlier values. Qualitative evidence has also been included in the discussions on which attributes are outliers, as well as comparison with PR14 valuations and other water companies.	Closed
44	The company was challenged to consider whether they are setting the bar too high with its aspirations for the "Best in class customer service and experience" project.	NB	Jul-17	We have reassessed the best in class research programme with the retail team and have agreed that getting better at the basics is in scope. The research approach will be modified to reflect this.	Closed
45	The company was challenged to consider constructing an enhanced service level that would enable it to put a value on different aspects of service - as a revealed preference experiment	NB / BC	Jul-17	The company chose not to take this suggestion forward due to concerns about delivery feasibility of a differentiated service / price package, as well as potential concerns from customers about a differentiated level of service / pricing. Subsequent research showed that customers considered different price and service offerings inappropriate for a water company. The company considered alternative revealed preference proposals from research agencies, including a proposal to undertake a project on river pollution. Following discussion with the subgroup (who considered the proposal to be another form of stated preference) the company elected not to take this forward. The company has taken forward a proposal for averted behaviour revealed preference research on supply interruptions. It was noted that the subgroup challenged that they do not consider this to be truly revealed preference but accepted that the approach would yield actionable insight, and an alternative valuation data point from a study which is very different from the willingness to pay valuation research. The results of this study have been used in the triangulation of valuations in order to determine the company's incentive rate for interruptions to supply.	Closed

## Customer Engagement Group challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
46	A member challenged the company that they needed a better understanding of how employee engagement would feed into the PR19 process.	Sub group	Jul-17	In our Engaging customer Appendix we have synthesised the insight for each outcome and for our performance commitments, including triangulating the insight to determine the customers' relative priority. Our insight synthesised has include the finding from our employee engagement (through both focus groups and the Bike on the Boat tour).	Closed
47	A member challenged that it is not always easy for water companies to analyse contacts other than written complaints.	Sub group	Jul-17	Complaints and contacts across our various systems have been analysed in order to determine the main sources of complaint and contact.	Closed
48	A member challenged that true active customer participation would involve every customer, not just customers on a panel (note that a much smaller panel was being discussed with Britain Thinks at this stage) – The company agreed that it would change the wording on the slide to reflect this point and clarified that it didn't intend to use the panel as the only means of driving participation from customers	Sub group	Jul-17	We agreed to change the wording on the slide to reflect this point and clarified that we didn't intend to use the panel as the only means of driving participation from customers. One part of our approach to customer participation has been to set up a much larger online community with 15,000 members, through a press, email and social media campaign to our customers. Whilst the community is there for on-going active communication, we will continue to interact with customers in many different ways online as well as offline, and promote participation in our services. Case studies of customer participation are included in the Engaging customers Appendix.	Closed
49	A member challenged the company to take as its starting point a clear explanation to customers that everything the company does has a detrimental impact on the environment unless it takes steps to mitigate that impact.	Sub group	Jul-17	This challenge shaped the deliberative research discussion guides, and this point was made clear to customers particularly when discussing the environment, biodiversity, supply demand.	Closed
50	Best in class customer service research - A member challenged the company to focus on the things that the company can deliver. This should be realistic or the company could start to chase unrealistic aspirations that would be very expensive or impractical to deliver.	Sub group	Jul-17	This challenge shaped the Best in Class discussion guide and questionnaire. In the research we focus both on future innovations in service, but also on how to get the "basics" right.	Closed
51	On the Strategic Challenges project, the company was challenged to give as much weighting to resilience challenges around waste water integrated catchment delivery and climate change as is given to challenges on the water side.	Sub group	Jul-17	We conducted deliberative research both on water challenges (e.g. supply demand) but also wastewater flooding, partnership working and flooding where there is multiple responsibility in the catchment.	Closed
52	A member challenged whether customers will be able to decide which levels of performance they want and why, and whether the project will cover the entire suite of ODIs and PCs.	IB	Jul-17	The research covered the main PCs, rather than the full suite, in order to keep customers engaged in the process and ensure they understood the material. Customers were asked about the proposed targets, including comparative information, rather than given the option to select the performance they wanted. This approach was determined in response to the Ofwat final methodology which states customers will not pay more for improved service.	Closed

## Customer Engagement Group challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
53	A member challenged that the company are trying to cover a vast range of subjects through one research project – support for strategic investments, PCs, ODIs and the social tariff cross-subsidy. He is concerned that Severn Trent can't cover all of this with a single group of customers; there's too much to do cognitively, and he strongly recommended questioning the researcher partner on this.	BC	Jul-17	Assurances that the cognitive burden was not too much were given from the market research subgroup chair and the agency conducting the research. The social tariff cross subsidy was also explored in more detail in a bespoke project.	Closed
54	A member challenged that the company is not asking customers to balance their preferences (i.e. do trade offs). He challenged the company to tell customers how much each item costs, in order to get views on whether the company is spending the appropriate amount in the right areas.	IB	Jul-17	Customers were asked about the proposed targets and given the context of the overall bill level. We did not ask customers to select the performance level they wanted but instead used a rich evidence base, including the views from across the insight programme, to set the PC targets	Closed
55	A member challenged that the proposals (in the choices research) seem to be couched in terms of what the company broadly thinks customers will want rather than clearly outlining specifics that customers can understand and express an opinion on.	IB	Jul-17	Our research partners gave good guidance on the type of language we should use in the design of the stimulus materials, discussion guides and questionnaires. We made sure we were only asking customers about things they could influence, as well as ensuring they had the right information to inform the decision.	Closed
56	A member challenged that customers don't understand the term 'asset health' so the language needs to be clearer.	BD	Jul-17	We didn't intend to use the word asset health directly with customers, but we did ensure they understood the metrics, such as mains bursts and sewer collapses, that we wanted them to engage on. We used an agency who no previous water industry research background to really ensure service attributes were presented in a way which was simple for customers to understand.	Closed
57	A member challenged that the research would need to show bills now, the lowest they could be, how much of the bill reduction is for, statutory improvements and what aspects customers can exercise choice over.	BC	Jul-17	The Choices research was designed taking this challenge into account. We only asked customers to make decisions on aspects they could exercise choice over, and in the full context of bill impacts.	Closed
58	A member challenged that this is a huge amount to cover in a 20 minute survey.	BC	Jul-17	Assurances that the cognitive burden was not too much were given from the market research subgroup chair and the agency conducting the research. The social tariff cross subsidy was also explored in more detail in a bespoke project.	Closed
59	Members challenged that there doesn't seem to be any research into how much customers want Severn Trent to set the ODI range at. They challenged that the company should ask customers whether they want the company to have penalties and rewards.	IB / BC	Jul-17	We have asked customers about this in the both the qualitative and quantitative Choices research. We also engaged customers about ODIs through the online community and the acceptability research.	Closed
60	The WF challenged the company to get the customer insight compendium assured by a third party	NB	Jul-17	The customer insight compendium has been assured by a third party agency Trinity McQueen. They have provided a statement of assurance that was shared with the market research sub group.	Closed

Affordability challenges	Company response
<p>Are the existing affordability assistance schemes reaching the right customers, those most in need or who might benefit most?</p>	<p>The company responded positively to this challenge. It developed a number of “personas” based on the insight from its customer research and struggling to pay expert workshop. These describe the key characteristics and circumstances of customers in financially vulnerable circumstances and enable service offerings to be mapped against them. The hypothesis was that different personas could have different needs and that responding to each in a more focused way could be both more effective and efficient. For example, the needs of a ‘longstanding’ might be very different to the needs of a ‘sudden and severe’. For further details of the company response, see the Retail chapter.</p>
<p>The company should offer a broader range of affordability assistance schemes to support customers</p>	<p>Through its customer engagement programme, the company carried out quantitative and qualitative research, including in-depth interviews and co-creation sessions with customers. The objective of the research programme was to understand what customers want in terms of affordability assistance support, how effective the current support is and what more could be done to improve it. For further details of the company response, see the Retail chapter.</p>
<p>Can the company develop affordability assistance schemes which help customers take better control of their payments, help customers get into new payment habits /rehabilitation?</p>	<p>However, the company accepted the RSG challenge that it should go further. As a result, the company developed a new concept called Matching Plus. The Matching Plus scheme deals both with current payment issues and historical debt through creating a “partnership” or contract approach. It was devised through consultation workshops with expert debt agencies etc. to discuss the terms of the proposed scheme. Further, there was a co-creation session with customers to discuss social tariffs and debt which showed significant support for this scheme. For further details of the company response, see the Retail chapter.</p>
<p>The company should identify the most appropriate ways to communicate with customers and raise awareness of the support available</p>	<p>The company shared its plans to drive insight from its payment systems and intelligent use of data (including data sharing through credit reference agencies). This could proactively identify customers who might benefit and enable the company to reach out to them directly in a sensitive and targeted way. For further details of the company response, see the Retail chapter.</p>
<p>The company should consider funding some of the affordability assistance programme themselves out of profit.</p>	<p>The company completed a specific piece of research to understand the extent to which its customers would be willing to fund social tariff support in the future. The research found that a significant majority (67%) of customers are prepared to pay £8 per year to subsidise the social tariff support scheme. For further details of the company response, see the Retail chapter.</p>
<p>The company should increase the proportion of customers supported through the Help to pay when you need it performance commitment</p>	<p>The company shared available benchmarking data on other water companies to show Watersure volumes as a proportion of metered connections and how the forecast volumes had been calculated. The RSG confirmed this addressed this specific challenge and felt the Watersure forecast volumes were stretching. For further details of the company response, see the Retail chapter.</p>

Affordability challenges	Company response
<p>The company should consider whether the Household voids performance commitment targets were challenging enough given that it is a reward only</p>	<p>The company shared further detail on how the targets were challenging and how they have set up an ODI target and an internal stretch target. While the ODI target is a reduction in voids of 841, the ODI reward structure means that the company will incur additional costs if the reduction is fewer than 13,455 properties (8% of current voids). This represents a significant and stretching target. For further details of the company response, see the Retail chapter.</p>

Vulnerability challenges	Company response
<p>With such a disparity between the numbers of vulnerable people across the UK and the number of customers on the priority service register, the group challenged the company to refine its categorisation of “vulnerable” customers</p>	<p>The company re-evaluated its approach and the RSG reviewed the development programme and was content with its quality and rigour. For further details of the company response, see the Retail chapter.</p>
<p>Identify the specific needs of those groups and build a tailored, targeted proposition to meet them</p>	<p>The “personas” shared by the company addressed this challenge and included multiple vulnerabilities. The company also mapped the “personas” to the targeted propositions to ensure all needs were met. The RSG commented that the resultant framework was in line with their expectations and best practice. For further details of the company response, see the Retail chapter.</p>
<p>Reflect on whether and how vulnerability changes and is dependent on circumstances</p>	<p>The company initially responded to this by carrying out internal research. They engaged with senior management teams, operations teams and their views led to findings subsequently validated by external experts at a later workshop. Further validation came from cross matching the findings to consumer research outputs. For further details of the company response, see the Retail chapter.</p>
<p>Look more widely to identify best practice both in identifying priority needs customers and delivering services to them</p>	<p>The company is investigating a trial programme with Western Power Distribution to identify and fulfil the needs of customers in vulnerable circumstances across the region. For further details of the company response, see the Retail chapter.</p>
<p>Consider and identify suitable partners who could support their work and better connect with vulnerable customers either individually or collectively</p>	<p>Through the research and engagement programme the company has forged links with a new range of civil and religious organisations. For further details of the company response, see the Retail chapter.</p>
<p>Consider including a second vulnerability performance commitment focussed on supporting transient vulnerable customers</p>	<p>The company agreed that this group of customers are important to support and had already included in their proposals activity to identify transient vulnerable customers through promotion of support available and opening additional priority channels during an incident. The company has also included two dedicated vulnerable need codes on its Priority Service Register to enable them to easily record this group’s needs and provide support.</p>

Communicating with customers challenges	Company response
<p>Develop an appropriate communication plan to raise awareness of the Priority Service Register and respond to their needs</p>	<p>The company has amended its terminology and now uses the term customers in vulnerable circumstances (CIVIC) rather than vulnerable customers. This reflects the fact that both personal and external circumstances, such as flooding, supply interruptions etc. can lead to, or exacerbate, vulnerabilities in customers. For further details of the company response, see the Retail chapter.</p>
<p>Ensure customers are appropriately engaged and informed during interruptions to supply or in other circumstances that may trigger an issue for customers in vulnerable circumstances</p>	<p>As an example of the company's response, through its research with different groups, the company has engaged positively with the d/Deaf community and has introduced a range of sign language videos which can be uploaded when needed. For further details of the company response, see the Retail chapter.</p>
<p>Raise awareness of social tariff/support customers with affordability issues</p>	<p>The company's response and service proposals relating to these customers can be found in the below challenge.</p>
<p>Engage customers generally to understand what communication they want from the company</p>	<p>The company responded to this challenge through its co-creation workshops. For further details of the company response, see the Retail chapter.</p>

Retail Sub Group challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
1	The WF challenged ST as to whether they have chosen the right categories as part of the market segmentation work for vulnerable customers.	KM	Apr-17	Severn Trent shared the reasoning for categories selected in Water Forum on 21st July - it was based on common language across the water industry, best practice and common approach across energy industry. ST have aligned the approach to the Water UK cross company work. ST will continue to validate the categories through benchmarking and learning. The categories are for registration and identifying service required. ST are also developing personas to recognise customers may be in more than one category.	Closed
2	The WF challenged if Severn Trent have sufficient resources in place to deliver an industry leading retail plan	KM	Jun-17	Severn Trent acknowledged that more resource was required, as such a Programme Manager has been brought in to assist Luke (Simon Phelps), and further expertise for Vulnerable and Customer experience workstreams has been acquired (Heather Nunnerley). Severn Trent shared their approach to resource in 17th July meeting and aligning those who have SME knowledge and those who are working on related today's projects. Further full time SME resource on affordability and vulnerability came onto programme in November 17.	Closed
3	The WF Chair noted that the forum are looking for reassurance that work is progressing on the retail plan	GB	Aug-17	Severn Trent recognise that they need to step up pace. Additional resource has been put on work as per challenge log item 6. Feedback on 17th July Water Forum and 25th Aug sub forum that work has moved a long way in the last 6 weeks. At 25th Aug meeting shared that draft commentary/proposals will not be available at Oct Water Forum and agreement that sub forum meetings will be arranged in line with delivery dates.	Closed
4	CCW challenged that water companies could consider co-funding the social tariff to help support more customers	BC & GD	Aug-17	Severn Trent undertook specific social tariff cross subsidy research to ask customers how much they were willing to pay and also ask them if they would contribute more if Severn Trent also contributed. 67% of customers are willing to pay a cross subsidy of £8 without the need for Severn Trent to contribute. Severn Trent felt this was a good level of cross subsidy and have chosen to invest 1% of profits into a community dividend instead to help communities. Severn Trent already funds some wider affordability support, e.g. Severn Trent trust fund donation, Care and assistance team and external relationship team. Severn Trent ran a payment matching trial which is being self funded to provide additional support and will be launching this ready for 2020.	Closed
5	The WF challenge that the customer research is missing customers that you provide a service to but don't bill as another company bills on your behalf – south staffs customers and other border customers.	GD	Oct-17	The majority of our single served customers receive their water service, and billing, from South Staffs Water. In the past we have tended to be slightly neglectful of this customer group, however within both our valuation research and acceptability research we have included sizeable samples of these customers. We have strengthened our relationship with insight contacts at South Staffs Water and collaborated on our acceptability research by sharing bill profiles in order to make both sets of research more meaningful for customers. We have also discussed "business as usual" collaboration on a project that South Staffs are looking at in the future on designing improvements to their current bill. We will be considering how our new struggling to pay scheme works for cross border customers, and also looking at how we manage debt processes for these customers.	Closed
6	The WF fed back that the retail research programme is looking like a very robust programme. The WF think that Severn Trent need to assure the forum that they can deliver within the tight timescales and have time at the end of the data gathering process to work up schemes etc. .	KM	Oct-17	Severn Trent recognise the tight timescales and arranged playback sessions at each stage of the customer research to get feedback on what customers are saying to help avoid the risk. Severn Trent will sent sub group interim playback findings when they come through and feed into November and December sub group meetings.	Closed

Retail Sub Group challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
7	The sub group challenged whether there was enough of a focus on customer culture change and how this was been addressed now, not just waiting until next AMP	GD	Nov-17	Severn Trent recognise that driving the right culture is key to achieving success. Specific focus area on cultural shift in customer service proposals shared in November sub group. Current activity to drive cultural change this AMP shared in December sub group.	Closed
8	The sub group challenged that Severn Trent need to be more specific around proposals of how they will promote their support for customers who are struggling to pay	GD	Nov-17	Severn Trent will continue to work with trusted external organisations who customers engage with to help promote support. Severn Trent will also include that support is available in its brand and marketing campaign (included in June/July 18 campaign). Severn Trent will also use credit reference agency data share to proactively identify customers who might need support and offer it to them. This is in addition to engaging customers through existing touch points.	Closed
9	The sub group challenged that Severn Trent need to share more detail on plans for communicating/educating/engaging with customers	GD	Nov-17	Severn Trent ran a specific customer co-creation session as part of research programme on how to effectively communicate and engage customers and an additional specific co-creation session on metering engagement. Severn Trent shared their brand engagement approach at December sub group meeting to build credibility. Severn Trent propose to target comms and engagement messages to specific customer groups using segmentation and analytics. Severn Trent will communicate across a range of mediums depending on the message. Severn Trent will also capture customer contact preferences. Severn Trent have collated a range of metering myths that they will answer in order to build trust around water meters.	Closed
10	Sub group challenged on whether the breakdown of mental health/emotional list of conditions was too specific	KM	Dec-17	The company have reviewed the need codes in line with GDPR guidance and action oriented codes and have amended the codes to give a balance.	Closed
11	Sub group challenged that the PSR/incident PC measure calculation relies on people being on the register and doesn't take into account wider vulnerability. How does the company propose to have the correct people on the register?	GD	Feb-18	Severn Trent have built into proposals two specific propositions relating to promotion of PSR and also proactively identifying customers who might need support. Severn Trent will also be participating in energy sector data share from 2020 and a trial with Western Power Distribution in 2019/20. Severn Trent have forecasted a step change in PSR numbers through the App4 common metric data table.	Closed
12	Sub group challenged whether the struggling to pay PC unaffordability % should be reviewed following year 3 of AMP 7 to ensure it is still appropriate and if required a full PC review undertaken.	GD	Feb-18	Severn Trent have built a review of unaffordability and the performance commitment into their plans.	Closed
13	Sub group challenged whether Severn Trent only count water health checks that are done with customers who are struggling to pay, or if some customers with no affordability issues complete these.	GD	Feb-18	Severn Trent acknowledge the challenge and will look to report on those who are struggling to pay only as part of the scope of the performance commitment.	Closed
14	Sub group challenged why the voids PC was reward only and queried whether a penalty should also be considered.	GD	Feb-18	Severn Trent acknowledged the challenge and evidenced how customers would benefit from the reward only and that the company generally are covering costs. Severn Trent shared how this was the approach to align to Ofwat's proposal for PCs/ODIs for voids and gap sites to ensure companies were incentivised to drive performance in this area.	Closed



## Retail Sub Group challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
15	Sub group challenges whether the social tariff cross subsidy increase should be increased at £1 per year	KMc	Mar-18	The company shared how it wanted to support as many customers as possible as soon as it could to make the most of the support customers were willing to provide. Rather than going the full £5 increase at once it was staggered. In 2020/21 an increase was not included as the scheme new design was being launched that year so an increase in volumes supported and also to mitigate against wider bill changes.	Closed
16	Sub group challenged whether the inclusion of the Severn Trent Trust Fund was the best course of action - not much control over what the fund is spent on. Also as the Severn Trent Trust Fund is a separate company.	KMc	Mar-18	The company acknowledged the challenge and felt that including it would mean locking in supporting additional customers for the long term. The donation was not confirmed for future but building it in would mean this volume of customers would be supported even if the scheme was not continued. The company also noted that other water companies include their equivalent. The company spoke to Auriga Services and they were supportive of including it. The company chose to include the water grant element.	Closed
17	Sub group challenged whether one of the vulnerability PCs should be penalty only. Possibly more likely the financial vul PC as the service one was such a new area. This would balance the reward only voids PC proposal.	GD	Mar-18	The company explained that the voids PC being reward only was aligned to how Ofwat were trying to incentivise companies and that customers benefit and the company breaks even. The company reviewed options for the H2PWYNI PC being penalty only. The penalty only would reward broader customer base and not those affected by failing to meet performance. The company looked at setting up penalty to be fed into affordability schemes but when investigating this further the number of customers that might be supported might not be meaningful. The company have opted to remain reputational as this will potentially be more impactful externally anyway.	Closed
18	Sub group challenged whether the H2PWYNI targets were stretching enough and whether there was more the company could do	GD	Apr-18	The company reviewed the PC targets and proposed to increase from 39% to 43% with the inclusion of home water efficiency checks, fix private leaks for free for financially vulnerable customers and Severn Trent Trust Fund.	Closed
19	Water Forum challenged whether the company should consider having an additional PC for transient vulnerability to ensure promote and provide support to this group	BC	May-18	The company considered options and felt it would require 2 PCs to cover the scope as Ofwat do not allow compound measures. The company feel with this being a late challenge it might leave a risk of unintended consequences so propose to develop the measure in AMP7 and measure as shadow.	Closed

## Investment Sub Group challenge log

Challenge	Company response
<p>The ISG challenged the company to seek customers' views on the supply and demand options and evidence this. Also to ensure that customers are clear about the difference between statutory and non-statutory duties.</p>	<p>The company commissioned deliberative research and depth interviews on supply demand, and triangulated the findings with the insight from the wider insight programme. During the deliberative research they explained in detail the challenges and options that are available. These included; metering, water efficiency, leakage reduction, imports (from other water companies), new abstractions, expanding reservoirs and re-using effluent. The company made it clear from the beginning, where it had a statutory responsibility to comply with any challenge.</p>
<p>The ISG challenged the company to ensure that the proposals for water trading, even if cost neutral, should be subject to customer engagement.</p>	<p>As part of the deliberative research, the company presented options to customers that included trading (imports and exports) with other companies. Customers were initially sceptical of this as a long term solution. The company has also done joint research with Thames Water and United Utilities on the topic of water trading.</p>
<p>The ISG challenged the company to ensure that customer statements supporting Cost Adjustments should be evidenced to specific research. This would provide a line of sight and provide 'weight'</p>	<p>Each business case (for the Cost Adjustment Claim or Enhancement) now contains an appendix that shows the Line-of-Sight between the various sources of customer research and the actions the company has taken to respond to customer views. Additionally it has considered the relative weighting of each finding. This is based on whether multiple sources of evidence converge on the same finding or whether there are contradictory views, on the type of research and how tailored it was to the specific question.</p>
<p>The ISG challenged the company on the process / timeline for developing the dWRMP allows time to unpick any key model assumptions if challenged.</p>	<p>Session arranged with Dr Steven Wade (ISG expert on climate change) resulted in Dr Wade being confident the process the company is following is robust. Subsequent to this review the company continued to refine its modelling based on latest thinking. One key refinement was the approach to accommodating the uncertainty associated with Climate Change. An option has been developed to identify schemes associated with coping with the impacts of Climate Change Uncertainty. This will allow the company to carefully monitor the need for these schemes in the future as more uncertainty gets resolved. Each model run clearly shows what constraints and assumptions have been used so it is easy to isolate these at a later date if the need exists</p>
<p>The company was challenged to demonstrate whether there is overlap with the optimised set of solutions to address water resources (statutory) and the set of solutions to address water supply resilience (non statutory) and ensure there is no conflation of costs.</p>	<p>The company has brought together a list of optimised solutions from WISDM and DMU and compared that with the list of preferred solutions from its Resilience programme. This has been checked for duplications. In November 2017 it appeared that a solution from its dWRMP would also solve one of its resilience needs. It then removed this resilience solution from the resilience programme. Ofwat reporting guidelines provide clear advice on how to deal with solutions that deliver multiple benefits and the company will follow this guidance.</p>
<p>The ISG challenged the company to demonstrate in relation to the Supply Demand Balance investment model (WISDM and DMU), if it can pull out why decisions were made and help the ISG understand how the least cost option has been built?</p>	<p>The models provide amongst other things the least cost options given the constraints we set (climate change, leakage reduction and meterage penetration). These constraints are clear. The company can demonstrate why schemes have been chosen. It is important to realise that the model aids decision making in an uncertain future – it doesn't give 100% confidence in an uncertain world, but it helps the company make 'least regrets/low regrets' decisions.</p>
<p>The ISG challenged the company to show how much each of the strategies (leakage reduction, metering and water efficiency) deliver in terms of MI/d per £ invested. How reliable are the estimates of impact and what is the approximate bill delta for each of the strategies?</p>	<p>The company provided some generic guidance on how much each investment would impact the bill for budgeting purposes – estimated to be c£1 bill increase for every £100M new capital investment. This is dependent on depreciation rates of assets built and the operational (cost) impact of the solution proposed. Estimates for each proposed investment have been provided together with bill impacts (April 18 and May 18). Cost per MLD of the various Supply Demand Balance interventions provided in detail in May 18.</p> <p>The company has continuously refined its project estimates and locked them out at mid-May.</p>

Investment Sub Group challenge log

Challenge	Company response
<p>The ISG challenged the company to reconsider its original statement relating to leakage proposals, 'We can go beyond that but we start to become cost – ineffective. We do not believe that is in the best interests of customers'. While this may be possibly correct, it does not sit well with customers who want you to go beyond this.</p>	<p>Customers have shown through the deliberative research, Choices Research, WTP survey and Quarterly Tracker, that tackling leakage is a top priority and an emotive issue for customers. The business plan contains its most ambitious leakage target it has ever proposed (15.6%) and goes beyond what it considers to be the sustainable economic level. The company has no clear evidence that customers want it to go beyond what is cost effective. It has evidence from customers on how they appraise best value and it suggests they want solution effectiveness and cost effectiveness across the long term. The company's extensive liaison on its dWRMP shows support for its leakage ambition. It has set out its longer term plan (to 2045) which continues to drive leakage down further.</p>
<p>The ISG challenged the company to demonstrate how much time it takes to commission new sources of water from agreement in principle (the work plan) to production of water?</p>	<p>Examples from other AMPs indicates up to 8 years to secure new licences, drill and test boreholes, design and deliver water treatment production plants. Whilst construction of new surface water works is much rarer, the company is confident they can generally be done faster than groundwater sites where the uncertainty on water quality and water volume is much higher.</p>
<p>The ISG challenged the company to provide its view on what could happen to customer trust when an enhanced metering programme is implemented.</p>	<p>The company has used deliberative research to deep dive into metering to fully explain the impacts including; the likely benefits, concerns, tariffs and potential behaviour change. Customers support for increased metering was overwhelmingly positive, although there are a number of myths that need to be dispelled. To help the company understand how it can best implement this initiative, it has spoken to other water companies that have gone further with metering as well as running a co-creation workshop with customers. The company is using this learning to manage our communications and messaging to ensure it develops the right relationships with its customers on this topic.</p>
<p>The ISG challenged the company to consider how the company could demonstrate to customers how much should be invested in the environment, particularly if going beyond the statutory? Also how it would manage customer feedback and choices around statutory and on statutory requirements.</p>	<p>The research tells the company that customers are in support of its environmental improvement programme. They support its proposals to work with partners to solve (environmental) problems. This offers the opportunity to go beyond statutory obligations at relatively low cost. Customers have also told the company to be mindful of costs to manage bills. The company will therefore implement a mechanism to assess benefits and costs which seeks to appraise more than traditional benefits (e.g. minimum statutory compliance for lowest TOTEX), to include wider environmental benefits, subject to overall affordability. It has sought customer views on how it should respond to statutory obligations and non-statutory proposals. These views have been factored into proposals as described in each business case. Areas where customers were offered/expressed choices included; pace of investment, hierarchy of solution options, solution preferences, going beyond statutory obligations</p>
<p>The ISG challenged the company to say what it does for the environment in external communications</p>	<p>The company's environmental values and activities are a core component of its communication plans across four different communication programmes:1. The company is developing a new and more immersive educational programme for PR19 that targets primary school children and will aim to inspire the next generation of water users. It will show children where their water comes from and how wastewater is treated along with the impact of both activities on the environment. 2. The company's impact on the environment is also a key feature of its customer communication plans underpinning the new brand proposition 'Wonderful on Tap', with campaigns already incorporating messaging about the improvements we make to the environment. 3. The company's operational communication plans – i.e. those that accompany specific capital schemes also inform the local population of environmental benefits. 4. The broader corporate communications such as Annual Reports, Industry presentations and trade, local and national press releases convey the company's environmental credentials, performance and impact.</p>
<p>The ISG asked the company to show that their developing business plan meets the challenge laid out in WISER.</p>	<p>The company has shared its assessment and has incorporated the main elements into the plan. It is confident that it is meeting the challenges.</p>

## Investment Sub Group challenge log

Challenge	Company response
<p>Both the Water Forum and ISG challenged the company to explore opportunities to be able to evidence the benefits of sustainable integrated environmental planning, considering financial, environmental, legal and societal costs and benefits.</p>	<p>The company is adopting an integrated catchment approach by reviewing its Farming for Water protocol; working with 3rd parties on a Catchment Based Approach and mapping WINEP outcomes at a catchment scale to identify opportunities for integration. There is a significant amount of work to do during the development of the next river basin. The company are developing their natural and social capital approach to help identify costs and benefits and have trialled the approach developed by Water UK, engaged a specialist consultant to help develop understanding and used the EA's cost benefit model. It hopes to incorporate more of the outputs of this work into the developing 3<sup>rd</sup> Cycle River Basin management plan to maximise the benefits from integrated planning</p>
<p>The ISG challenged the company to ensure that the assurance process would address and reflect the challenges it had raised as well as those from the main Water Forum. Further to this, evidence how the process supports and informs/involves customers so that it is transparent?</p>	<p>The company have shared its detailed assurance process with the Water Forum and ISG which provides board level assurance. The company is considering how this might be shared with the customer panel in the future.</p>
<p>The ISG challenged the company to demonstrate how the environment was being taken into account, or even driving, the company's work on innovation</p>	<p>The company has actively sought to drive innovative solutions into the plan to identify sustainable solutions. Examples were provided relating to its work on leakage, on phosphate reduction (investing over £5M) and their Global Research challenge to identify cutting edge methods or technologies to reduce flooding.</p>
<p>The ISG challenged the company to look at partnership working and provide greater differentiation between urban and rural areas, linked to economic growth in regions</p>	<p>The company has a number of different partnership initiatives to improve environmental benefit. These ensure it creates the widest possible number of opportunities to work with and support partners e.g. STEPS (Severn Trent Environmental Protection Scheme) working with farmers to help them reduce their impact on water bodies (surface and groundwater), 'Cash for Catchments' to support NGOs in delivering environmental benefits, CaBA (Catchment Based Approach) partner to deliver catchment based solutions</p>
<p>How will the company secure appropriate customer protection from CSO interventions when the scope and outcome is not clear</p>	<p>The CSO intervention programme is driven by the company's need to deliver WFD compliance. It has a Performance Commitment and outcome delivery incentive which protects customers in the event of under-delivery of WFD compliance. These were reviewed and accepted by the PC/ODI sub group.</p>
<p>The ISG challenged the company to provide AMP6 planned investment v platform for AMP7</p>	<p>In AMP6 the company planned to invest c£25M on SEMD work adopting the recognised prescriptive approach. By the end of AMP6 it is forecasting to have invested c£50M to deliver improvements. This is based on deploying its innovative risk based approach (which saves c£25% against the traditional prescriptive approach, which existed at the time of AMP6 when its c£25M estimate was formulated). In AMP7 the company is currently forecasting c£85M investment for physical improvements (using its innovative risk based approach) and cyber improvements</p>
<p>The ISG challenged the company to provide more clarity on residual risk for itself and customers. It should link research findings (inc source) to the proposal and the bill impact of the work</p>	<p>Given the current CPNI/DEFRA guidance the company considers its High Priority National Infrastructure sites carry an intolerable risk exposure (to terrorism/hardened criminals). Post-investment this will move to tolerable (with residual risks still present) with for example, better detection, monitoring, access/egress systems. The company's internal security experts and cyber experts will sign off design proposals to ensure they meet the requirements of the PSG and Water UK Security Standards. The SEMD assurer has reviewed its approach and considers it proportionate.</p>
<p>The ISG challenged the company to provide benchmark investments for other companies given their proposed programmes</p>	<p>The company has sought views from other companies but have been unable to access any meaningful reliable data. UUU/YWS/Thames and SVT are the main companies who are required to adopt Protective Security Guidance on its High Priority National Infrastructure sites (as it carries the majority of the stock of these assets in England). Use of its risk based approach, reviewed by internal experts and period reviewed by external experts will ensure its proposals are appropriate and proportionate throughout AMP7.</p>

## Investment Sub Group challenge log

Challenge	Company response
<p>The ISG challenged the company to be clear how and where customers are being consulted on both Water supply risk and Water Quality risk.</p>	<p>The company has used multiple sources of research data to understand customer expectations on both water quality and water supply risk. In addition to the insight from the research undertaken to develop the PR14 strategic resilience case for Birmingham, the company undertook further detailed deliberative research and in depth interviews with customers in November 2017. In addition to the WTP research being used in cost benefit analysis the Choices research was carried out in March 2018 to confirm support for the investment proposal and the impact on bills.</p>
<p>The ISG challenged the company that it needed to provide clarity that the optioneering and solution process delivers value for money and results in a plan that customers agree with.</p>	<p>Optioneering has been carried out at both a programme level (for programmes) and a project level. The two drive value for money and different benefit streams. The company shows what options have been considered and how customer views are factored into.</p> <p>The Choices research and deliberative research clearly demonstrates that customers support the proposal within the cost estimate envelope (i.e. estimated bill impact). The company engaged specialist cost consultants to review estimates for a selection of projects which it considered to be representative of each programme. They consider that, given the stage in the project lifecycle, the company's estimates are competitive.</p>
<p>The ISG challenged the company to confirm if the Derwent Valley Aqueduct proposals will lead to a cost adjustment? And if so, whether specific customer research is needed.</p>	<p>The original slides showed an error. Resilience should have been £64M and Readiness should have been £21M. Readiness has now been incorporated into the business case and described as 'Network Enhancements'. The overall expenditure for this programme of work is estimated to be c£104M (down from £185M as described in October 2017)</p>
<p>The ISG challenged the company to justify the significant changes in the proposed solutions and costs between those provided to the Water Forum in October 2017 and the ISG in December 2017</p>	<p>The slides have now been corrected. Resilience should have been £64M and Readiness should have been £21M. The reason readiness has been removed is that at this stage I believe it is base plan expenditure – I was trying to show the impact of the investment additive to the plan. However if it turns out that readiness for the DVA is an extra over we will bring it back into the plan .</p>
<p>The ISG challenged the company to make clear for each option, what the benefits were for customers. It should also ensure support of these is evidenced by specific research.</p>	<p>Options appraisal process identifies the different benefit streams available to customers. Given the project lifecycle, the company has identified primary benefits only at this stage (i.e. will the solution solve the problem). During detailed feasibility and design it is predicted that the company will be able to identify further benefits as more granular information comes to light and understanding of constraints improves.</p> <p>Extensive customer research findings have been summarised in each business case and the company's 'Line-of-Sight' document which links customer findings to proposed actions. Customer findings have also been qualitatively scored so the appropriate level of reliance on each finding can be applied. Through AMP7 the company intends to undertake live research using its online Tap Chat community to gather dynamic feedback.</p>
<p>The ISG challenged the company to make clear how the options / plan is to be assured (technical, cost, TOTEX, innovation etc)</p>	<p>Assurance of process was presented in March 2018. Relevant parts reviewed with ISG but also shared with Water Forum latterly.</p>

## Investment Sub Group challenge log

Challenge	Company response
<p>The ISG challenged the company with regard to supply interruptions, what proportion of customers feels they should pay more to get the service they are already paying for?</p>	<p>The level of resilience service customers expect does not exist today across the totality of the SVT customer base, for a number of historic factors and cost constraints. Over time the company has steadily improved resilience being mindful of bill impact. This proposal continues into AMP7. The service being proposed represents first time resilience (of this standard) for these customers. The Deliberative research and Choices research clearly shows a large majority of customers support our proposals (78%).</p>
<p>The ISG asked the company how the proposed investments in the options identified compare with that in AMP6?</p>	<p>The options that the company has reviewed build on the learning from AMP6. The company is proposing some duplication of key process streams and network enhancements as it did in AMP6. The key difference between AMP6 and AMP7 relates to programme scale. AMP6 relates only to one treatment work (Birmingham) and is very large in scale, whereas AMP7 proposals relate to a number of smaller works across the whole asset base.</p>
<p>The ISG challenged the company to provide a clear rationale for the company's change of view with regard to the proposed supply and demand and waste water quality Cost Adjustments</p>	<p>The company has undertaken deliberative research on the proposed uncertainty mechanism and believe its customers support its proposals as it gives them protection. These findings are also consistent with some quantitative results obtained through the online panel.</p>
<p>The ISG challenged the company to undertake additional specific research that customers support the changes proposed. This should include deliberative research and cover, amongst other things, bill volatility.</p>	<p>The company has conducted both deliberative research and research via our online Panel. Findings demonstrate customer support for the uncertainty mechanisms.</p>
<p>The ISG challenged the company to consider the impact on Performance Commitments and ODIs, especially the mechanisms for agreeing rewards / penalties. Where possible these should be outcome or at least impact measures.</p>	<p>The impact of the Uncertainty Mechanism will not change the service that the company is seeking to deliver in each investment proposal. It will only change the quantum.</p>
<p>The ISG challenged the company to identify what the mechanism for implementing a change in AMP7 would be? – For example what would be the decision making process for implementing a 'Amber' scheme during AMP7?</p>	<p>The company is working through its proposals to understand when an 'uncertain' project (i.e. Amber) becomes 'certain'. On the wastewater programme agreed criteria exists with the Environment Agency to move a project from Amber to Green (which relates to confirming environmental need and cost benefit). For the Supply Demand proposal it will use the latest climate change information that will be available in CP18 (due late 2018) and remodel needs based on this data. Current needs are based on CP09 (9-year-old data sets).</p>

## Investment Sub Group challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
1	We need to define key focus areas where the Water Forum Investment sub group should best spend their time and key areas where we trust there is enough by the regulator and assurance process	BD	May-17	Focus group session was held on 20 July. Outputs from Oats methodology consultation used as a guide. Champions were agreed for key parts of the plan.	Closed
2	Key challenge will be ensure the Water Forum have access to the outputs from assurance provider to give confidence on modelling. Severn Trent to share outputs from the assurance process	RC	May-17	A session on modelling was covered on the 12th. Following that we shared outputs form the assurance process. We shared slides on the assurance process in Feb 2018 and presented them to the group in March 2018	Closed
3	Water Forum's key challenge on need to demonstrate that resilience has been considered in its widest sense, including environmental resilience	All	May-17	Resilience update was provided to Investment sub group on 20th July. Resilience proposals shared on 12th Dec 2017 and 18th Jan 2018. Additionally we engaged Arup to provide specialist advice on resilience, specifically how proposals measure up against their resilience framework.	Closed
4	The WF questioned if we are assessing integrated catchment planning as part of our solutions and how we demonstrate that	BD	May-17	The company is using an integrated approach to catchment planning. We shared more information about our catchment planning approach at the February and April ISG meetings.	Closed
5	The Water Framework Directive's 'Big Challenges' should also extend to cover other protected areas in order to satisfy Natural England's concerns	IB	May-17	Of the sites/schemes that the company has been focussing on there are 11 with potential CROW act drivers (SSSIs) and 2 with Habitats drivers (SAC). They are considered in the same way as WFD schemes but some of their cost will be allocated to different business plan lines.	Closed
6	On our water resources planning approach, the company was challenged on how its process and timeline will allow time to unpick any key model input assumptions if challenged (e.g. its choice of a design drought scenario)	SW	May-17	Expert session organised with Steven Wade. Outputs and feedback from session discussed on 20th July. Confidence expressed by Steven that the process team are following is robust.	Closed
7	How will the company ensure that customers are clear about the difference between its statutory duties (where customers may have very limited choice) and non- statutory duties where there may be more choice.	RC	May-17	Difference between statutory and non statutory duties covered with Water Forum in session on 12th May 2017. Deliberative research and choices research made it clear to customers whether our proposals were driven by statutory needs or whether our proposals were optional.	Closed
8	How Smart Networks/ Real time monitoring will be fed into the AMP7 plan	BD	May-17	This was discussed as part of the Innovation session in the main meeting. Further to this it was part of the base plan submission.	Closed

## Investment Sub Group challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
9	The company needs to rise to the challenge of biodiversity, encourage and enable staff to grasp and develop biodiversity opportunities. Monitor progress within the company without which it is difficult to see how the company can truly meet its aspiration to be an environmental leader (challenge via email).	IB	May-17	An email from Ian following company action, confirmed this action is closed. Natural capital specialists were also brought in to help with identifying biodiversity benefits.	Closed
10	Look into co-creation – talk to environmental stakeholders again to look for opportunities	WF	Jul-17	Co-creation sessions incorporated in to customer research and stakeholder engagement e.g. WRMP	Closed
11	Create checklist for OFWAT guidance	WF	Jul-17	Discussed at main Water Forum on 27th Oct 2017 and again in January 2018 as well as in the Investment sub group 18/01/18	Closed
12	Innovation to be included in future agendas	WF	Jul-17	Discussed 7/09/2017 Investment sub group and implemented at main meetings following this.	Closed
13	Customer views on balance between supply/demand options are missing from WRMP	WF	Jul-17	We sought and obtained views on these at the Customer Deliberative Research session in October 2017. Additionally our WRMP was made public in Feb 2108 (for consultation - we will respond to views after consultation closes in July 2018). Shared customer views with Investment sub group on 14th Dec 2017.	Closed
14	Water Framework Directive - Bill Darbyshire of the EA is working on this in detail with the company and would bring a view on it to the sub-group so that they can discuss any key issues	WF	Jul-17	Discussed at main Water Forum on 27th October. Presented again at Investment sub group on 14/12/2017 and 12/02/2018.	Closed
15	The company challenged to consider targeting its demand management and leakage activity in areas where there was or was likely to be unsustainable abstraction.	SW	Sep-17	This is an integral part of our WRMP - our plans are focussed at Water Resource Zone level.	Closed
16	Severn Trent challenged again to ensure that the lessons learned this AMP feed into the (WRMP) model.	WF	Sep-17	We do update models based on current AMP learnings. We provided WRMP updates in Oct/Dec/Jan/Feb.	Closed



## Investment Sub Group challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
17	IB challenged the company to demonstrate how the environment was being taken into account, or even driving, the company's work on innovation.	IB	Sep-17	Innovation has been used to help delivering environmental priorities and outcomes. The approach to leakage, for example, is leading edge. Significant investment has occurred at Packington Severn Trent in AMP6 to help us drive cleaner sewage effluent to allow us to comply with tighter WFD standards than the EAs 'current 'technically achievable limit'. Work is underway in Birmingham city to implement our 'urban Demonstrator' project. Our Final Plan will contain a dedicated chapter on Innovation across the whole of our activities (including environment).  Confirmation from Ian by email (28/03/18) that this action is closed	Closed
18	IB commented that he thought the urban demonstrator was a very good concept and that he could see wider benefits of this work to improving the environment. He challenged the company to do more to ensure that there was wide visibility of the work and to share lessons learned from the project with others local authorities.	IB	Sep-17	Implementation work is ongoing with Birmingham and Stoke councils.	Closed
19	The company was challenged to think from a more holistic perspective – encompassing financial, environmental, legal, societal costs and benefits. This was not a simple return on investment calculation but could bring in the circular economy.	RC	Sep-17	Agreed wider benefits of investment to be outlined as part of discussions on choices. Natural Capital consultants have been supporting the company broaden how we appraise investment outputs. We are trialling Natural and social capital analysis where appropriate. Both monetised and non-monetised benefits will be attached to investments. A summary of the Natural Capital assessment approach was shared with the ISG in April 18. We are members of the UKWIR working group on Natural & Social Capital and we will implement into our project delivery processes and assessment methodologies to undertake wider benefit analysis (e.g. natural and social capital and others). The industry is learning how to deploy this methodology and we will develop our processes in line with industry good practice to ensure holistic benefit analysis is undertaken. However, we will only deliver optional benefits where we have customer support to do so.	Closed
20	Leakage - <i>'We can go beyond that but we start to become cost-ineffective. We do not believe that is in the best interest of our customers.'</i> Well intentioned I am sure and possibly correct but it does not sit well with the Customer led approach, we all know for instance that even when faced with a full understanding of the economic cost of leakage customers want you to go beyond that- this would run counter to the above but would be customers wishes.	IB	Post-Coombe Abbey mtg Oct-17 questions raised / response circulated Nov-17	Our customers have told us through deliberative research, Choices research, WTP and Quarterly Tracker that tackling leakage remains a top priority. Therefore our plan contains our most ambitious leakage target we have ever proposed (15%) and goes beyond what we can consider to be the sustainable (economic) level of leakage. Additionally, our extensive liaison on our Water Resource Management plan, shows support for this.	Closed

## Investment Sub Group challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
21	Do we have WTP research that suggests customers want us to go further than what we think is the lowest cost plan ?	IB	Post-Coombe Abbey mtg Oct-17 questions raised / response circulated Nov-17	Our deliberative research told us that customers want us to deliver the best value solution, rather than for the lowest cost option. The question of value and bill impact is particularly important when thinking about solutions that will take a number of years to implement. While most customers are happy to contribute to the cost of long-term water security, they are clear this should be spread out over time, so as not to cause undue financial burden for customers.	Closed
22	To include information on the time needed to commission new sources from agreement in the work plan to production of water or reduction in demand to help understand when investment needs to commence	IB	Post-Coombe Abbey mtg Oct-17 questions raised / response circulated Nov-17	Examples from AMP6 indicate c up to 8yrs to secure new licenses, drill boreholes, test boreholes, design and deliver treatment streams, buy land, Our work at Edgbaston is a good case study as is the work across Sugarbrook. Our Birmingham Resilience project will have taken 7yrs by the time we finish this AMP	Closed
23	There was a challenge to ask customers what they prefer in terms of an analysis of how each option can provides best value through. (a) create additional benefits to the company and its customers (b) create opportunities for benefits to other water dependant sectors issue.	IB	Post-Coombe Abbey mtg Oct-17 questions raised / response circulated Nov-17	Covered as part of deliberative customers research being addressed by Natural Capital consultants employed by Severn Trent outputs to be discussed at future Investment sub group. Challenge 54 also relates to this.	Closed
24	Supply interruptions - what proportion of customers feel they should pay extra to get the service they are already paying for.	IB	Post-Coombe Abbey mtg Oct-17 questions raised / response circulated Nov-17	In some geographic areas our service is at risk of outages that could not be easily and quickly recovered. If a risk crystallises we need to understand what period of outage our customers feel is tolerable and when it becomes intolerable. We have tested that through a WTP survey. It would appear that after 24hrs customers become severely impacted and we have tested their willingness to pay for this improvement (typically dual streaming, better interconnectivity, etc). Where this occurs we have drawn up plans to correct it and costed them out. This is not to address risks that have previously been addressed (or indeed to addressing risks that our customers have paid to address previously).	Closed
25	Is the company going to actually test customer willingness to pay or continue assuming that they want to pay and that the amount it costs is acceptable.	IB	Post-Coombe Abbey mtg Oct-17 questions raised / response circulated Nov-17	The WRMP is a lowest whole life cost plan with least regrets decisions given the uncertain future (climate change). Our plan comprises 4 elements of response to the deficit; reducing leakage, improving water efficiency, increased metering and new supply schemes. These elements have been combined to produce the least whole life cost over 25yrs given the need to maintain some flexibility in an uncertain future. Altering one element affects another (and will make the plan more costly). In the Choices research we presented customers with estimated costed choices for our optional investments. Customers demonstrated very strong support for this (85%).	Closed

Investment Sub Group challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
26	The company should be looking a shared solutions where possible with potential shared costs (or if you sell the water income streams).	IB	Post-Coombe Abbey mtg Oct-17 questions raised / response circulated Nov-17	We will undertake work to check for partnership working opportunities and also check for market based incentives – both these solutions can be complex to implement but offer holistic benefits. This will be reviewed as part of our Assurance	Closed
27	The figures in the table relating to Export options did appear to support the ISG’s concerns and this issue should be addressed in any options that involve trading water out of the company.	IB	Post-Coombe Abbey mtg Oct-17 questions raised / response circulated Nov-17	This is not the case. The schemes that could facilitate export are much less cost beneficial than the ones we are proposing for our customers. Some don’t include an treatment costs (e.g. treating final effluent is very expensive and not included here). Explained at Investment sub group 14/12/17	Closed
28	Work with stakeholders could be extended to co-creation of solutions where there are shared benefits Customer preference still needs to be included.	IB	Post-Coombe Abbey mtg Oct-17 questions raised / response circulated Nov-17	We will seek to share solutions where we can - we are already doing that through Catchment Management schemes and we will continue to do so.	Closed
29	It would be useful to see the cost effective information that supports the statements (slide 8). How much does each of the strategies (leakage reduction, metering and efficiency and education) deliver in the form of £ per Ml/d and how do these compare? How reliable are the estimates of impact? What is the approximate bill “delta” for each of these investments?	PQ	Post-Coombe Abbey mtg Oct-17 questions raised / response circulated Nov-17	Information on options CAPEX associated with each option presented at ISG on 12/02/18. Reliability of our plan was presented at ICG in Jan 18. The bill delta for the Supply Demand proposal was presented to ISG in April 18.	Closed
30	Under the table heading System Resilience there are now only two sub headings DVA Offline (£100m) and WTW resilience (£64m), whereas in the Water Forum slide 102 there were 3 sub headings DVA Offline (£100m), WTW Resilience (£21m) and Operational readiness (£64m). What thinking has given rise to the changes and reduction in overall expenditure?	PQ	Post-Coombe Abbey mtg Oct-17 questions raised / response circulated Nov-17	The slides have now been corrected. Resilience should have been £64M and Readiness should have been £21M. The reason readiness has been removed is that at this stage I believe it is base plan expenditure – I was trying to show the impact of the investment additive to the plan. However if it turns out that readiness for the DVA is an extra over we will bring it back into the plan.	Closed

## Investment Sub Group challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
31	How does the proposed investments in the options identified compare with that in AMP6?	PQ	Post-Coombe Abbey mtg Oct-17 questions raised / response circulated Nov-17	The monies are specific to each case (AMP6 projects) and proposed AMP7 projects. We will bring previous investment levels to 18/01/18 Investment sub group.	Closed
32	Will some or all of them lead to a cost exclusion or special cost factor claim? If so, for example for the proposed DVA work, (having regard to Ofwat guidance and the work undertaken in PR14 to support the Elan Valley Aqueduct proposal), should there not be specific evidence to support the DVA, as well as specific customer research and as with the PR14 EVA proposal, would it be useful to establish a Water Forum a subgroup to look specifically at this?	PQ	Post-Coombe Abbey mtg Oct-17 questions raised / response circulated Nov-17	Our view is that all elements of the Resilience investment proposal will be a cost exclusion/special cost factor. We also consider our statutory investments as a cost exclusion/special cost factor. Unlike PR14 our proposals are generally large(ish) programmes comprising relatively small projects so unless the project is significant we intend to use the thematic findings we have gained from all sources of our research. We may undertake project specific research as part of the on-line panel where the investment is considered material to the bill (say >£1 per year) and optional. We have carried out detailed research on resilience (Deliberative and Choices) but not about specific scheme at a local scale. At Dec ISG we agreed that it was reasonable to carry forward our resilience findings from PR14 and use in PR19.	Closed
33	It would be useful if for the meeting of the Investment sub group on 14 December if we could have feedback on Willingness to Pay findings relating to the scope of the Investment sub group and any outcomes from the deliberative customer research undertaken in October on drought and demand / supply options.	PQ	Post-Coombe Abbey mtg Oct-17 questions raised / response circulated Nov-17	Feedback from Deliberative Research and WtP provided at Investment sub group 14/12/17.	Closed
34	The navigational device that John has introduced (purple with WRMP at its centre) is very helpful. My one request is that he tightens up his explanation of the 'sweet spot'. What I take it to mean is that some investments impact more than one problem and that therefore the 'sweet spot' is that solution that maximises the mitigation of the problems at the minimum cost. Could he confirm this?	GB	Post-Coombe Abbey mtg Oct-17 questions raised / response circulated Nov-17	Yes that is what we are trying to deliver. Lowest cost, best value, long term sustainability and flexibility – these are all variables we are trying to manage .	Closed
35	The solution proposed sounds interesting but I am not aware of any customer insight. The team need to be aware of the requirement to share it with customers in a accessible way and the reaction of the Water Forum cannot be secured until that point - even if it has been previously presented.	GB	Post-Coombe Abbey mtg Oct-17 questions raised / response circulated Nov-17	Our Deliberative Research shows this – i.e. preference for demand management first. Finding of deliberative research shared with Investment sub group 14/12/17	Closed

## Investment Sub Group challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
36	One of the Ofwat requirements is to ensure that the company has considered options. How and when will options be addressed so that customers can compare and contrast?	GB	Post-Coombe Abbey mtg Oct-17 questions raised / response circulated Nov-17	During our deliberative research we presented options and we believe customers did express a clear preference. In terms of supply schemes we have circa 100 that we are reviewing (obviously not all these were shown to customers – but the general things we can do were). This will be tested as part of our assurance	Closed
37	The company was challenged to be clear on how and where customers are being consulted on both Water supply risk and Water Quality risk.	GB	Post-Coombe Abbey mtg Oct-17 questions raised / response circulated Nov-17	This has been taken from research on BRP but we have tested the desire for improved resilience on both water volume and water quality issues and we believe customers have given us a clear message again at PR19. We explained the proposal as part of our deliberative research and customers were supportive of the proposal. We sought further information in our Choices research - almost 80% of customers supported the proposal to improve resilience.	Closed
38	Improve Supply-Demand graphic to include how the interventions we are proposing impact demand and supply over time	PQ	Dec-17	Agreed and this was discussed and closed at the main January meeting and at sub group.	Closed
39	A challenge was made to ensure that all members of the ISG fully understand return periods events and to consider using percentage risk as well/ instead to aid understanding.	SW	Dec-17	The ISG were presented this information at the next sub group and confirmed this was useful.	Closed
40	Are customers paying twice for WRMP solutions i.e. mitigation AND full longer term solution. How do we demonstrate to customers and provide an understanding that not delivering schemes now is value for money and that this is the right thing to do.	PQ	Dec-17	We are adopting a cautious approach that is in-line with Ofwat PR19 Guidelines. This recommends we phase investment to avoid unnecessary costs. At the locations we are installing mitigation it is not clear that a full solution is required - WINEP supports this view.	Closed
41	Value for money of metering needs more discussion. Can we articulate the issue of water supply in the Severn Trent region versus other regions across the country? The sub group challenged whether Severn Trent has a view as to what will happen to customer trust and the relationship more generally if/when we meter	JB	Dec-17	We have spoken to other water companies that have gone further than us with metering. We are using this learning to manage our comms and messaging to ensure we develop the right relationships with our customers as we roll out metering. Noted but not for action in the Water Forum	Closed
42	How practical is it to deliver the options for river restoration and improvements work for AMP8 mitigation projects, considering the cross company work that's required, we should consider whether the plan is reasonable.	FM (for BD)	Dec-17	Our delivery plan is under development. We believe that mitigation work is deliverable based on our AMP6 experience. We have experienced people who have a track record and are using our learnings to plan for AMP7 (e.g. who is best placed to undertake work – landowners or Severn Trent). All these projects are now included in WINEP 3 and are thus mandated. We will seek to adopt a catchment based approach on these projects where appropriate.	Closed

## Investment Sub Group challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
43	It was discussed it would be useful to have an updated list of topics that are being covered and when they're being covered JB and RC agreed to look at this	RC	Dec-17	The forward agenda was reviewed and agreed at the pre-meeting with Water Forum on 12th Jan 2018	Closed
44	Can we demonstrate whether there is overlap with the optimised set of solutions to address water resources and the set of solutions to look at resilience?	RC	Dec-17	There is an overlap and we are optimising as we progress the feasibility. We have provided some examples e.g. DVA and new source for Nottingham. Supply demand will take precedence over resilience as resilience is an optional investment. This was covered off in February 2018 meeting.	Closed
45	It would be useful to set out life time TOTEX and whether schemes will run into direct procurement territory. Then clearly set out reasons for and against as to why we would not choose to be direct procurement.	BC	Dec-17	Our WRMP includes some schemes that may be Direct Procurement candidates but these are AMP8. We are engaging specialists to assure that we are appropriately assessing DP opportunities and this will be part of our assurance.	Closed
46	The proposed delivery plan needs to be discussed in more detail, proposing a plan that customers agree with. Need to be sure that the optioneering and solution process delivers value for money and results in a plan customers agree with.	BC	Dec-17	Optioneering has been carried out at a programme level and a project level. The two drive value for money and different benefit streams. We showed ISG and Water Forum which options have been considered and how customer views have been factored into proposals at the February and March meetings Additionally we have issued our customer line of sight spreadsheet at April ISG. Our assurance process will also review our CBA and Lowest WLC proposals. We presented to ISG the findings of Choices research in April to demonstrate further support.	Closed
47	Need to set out how are we proposing to assure the options/plan. Demonstrate the assurance process we are using to assure ourselves (technical, cost, TOTEX, innovation etc )	All	Dec-17	Assurance process was presented in March 2018 (slides circulated in Feb). We will share the relevant parts of the review with ISG but recommend this be covered off as a general Water Forum issue	Closed
48	Company and ISG to use 'green' PR19 guideline statements as a checklist for all Cost Exclusion proposals to show customers issues have been addressed and provide evidence to ISG.	ISG	Jan-18	This was used to undertake deep dives into all cost and presented back to the members.	Closed
49	Resilience - Important that assurance shows there is a clear difference and no conflation of costs between Statutory and Non Statutory projects.	ISG	Jan-18	We presented the PR19 assurance process to ISG in March 2018 meeting. TB & GB agreed that Assurance is not part of on-going focus. The allocation of costings follow prescribed rules. The company will follow these when allocating costs for Supply Demand and Resilience.	Closed
50	IB asked if this (Resilience) was supported by customer research as it was the role of the Water Forum to explain to customers what it would mean for them.	IB	Jan-18	We have 3 key sources of research which all support this investment proposal; Birmingham Resilience from PR14 (agreed at ISG Dec 17, that it was acceptable to carry this forward to PR19), Deliberative Research in Nov 17 and Choices research in March 2018.	Closed

## Investment Sub Group challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
51	FM asked that a high level assessment is undertaken to demonstrate that SVT are meeting all the challenges set out in WISER.	FM (for BD)	Jan-18	A first pass WISER response was sent to BD on 28/03/18. Feedback was very positive. Evolution of our response will be managed through the quarterly EPG meetings going forward.	Closed
52	In relation to Water Trading, we have challenged the company to identify innovative solutions that protects customers whilst helping address an issue of national significance.	RC	Jan-18	Company agreed to exclude from its plan TOTEX and instead use a real option mechanism to reflect the uncertainty. The Water Forum report states that the members are supportive of this approach and consider it is a pragmatic solution to a complex problem.	Closed
53	Company challenged to show there is customer acceptability of the mitigation and adaptation proposals and in addition take on board customers ambition for the environment.	FM (for BD)	Jan-18	As part of the Deliberative research customers told us they trusted us to adopt the appropriate technical solution but did express views on certain things - such as solution hierarchies (solving problems upstream first, partnership working etc). We believe adoption of mitigation or adaption on a site-by-site basis falls into the 'technical solution'. However we are also mindful that our WRMP was published for consultation in Feb 2018. Additionally WINEP 3 will list the Environmental Regulator's view of solution acceptability on a site by site basis. Taking all the above into consideration we plan to deliver in accordance with WINEP 3 but can flex our plans if feedback from WRMP shows customers want different solutions.	Closed
54	How can customers get the company to demonstrate how much should be invested in the environment, particularly if you want to go beyond the statutory?	IB	Jan-18	Our Customer Line of Sight document shows a number of views on how far we go beyond statutory obligations. We will plan just how far we go on a case-by-case basis based on benefits and costs.	Open
55	Has the company engaged with contractors on this yet?	RC	Jan-18	We are undertaking supplier selection throughout 2018 and 2019. No further action proposed	Closed
56	Metering: what steps are the company taking to improve education on metering with school children?	ISG	Jan-18	This is part of education programme and was presented at the January 2018 Water Forum. We have sought views from other water companies who have large scale metering programmes and are building this feedback into our comms plan - focussing on myth busting recognising the findings from the Deliberative Research. We educate children to use water wisely and explain to them how using a meter supports this. Our new education approach will be to offer our learning material to all primary schools across the Severn Trent and HD region, increasing our reach.	Closed

## Investment Sub Group challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
57	We need to understand the separate benefits driven through optioneering and how this would be for the benefit for customers. Customer statements supporting the cost exclusion/option need to be evidenced to specific research.	PQ	Feb-18	Options appraisal process identifies the different benefit streams available to customers. Customer support shown through the 'A1 Appendix: Engaging Customers' and customer comments - we will link research source to each investment proposal. Generally we will rely on thematic views from customers and apply those at programme level - we intend to undertake project specific research were project costs are large leading to a significant impact on AMP7 bills.	Closed
58	Resilience programme; the company should consider the approach to risk assessment and greater clarity on risk statements to show risk reduction or benefit – including sustainability and/or the environment. It would be useful to show the additional delivery that would be expected for an additional cost. It is important to demonstrate this in a clear and simple manner.	RC	Feb-18	Example presented at April ISG - low, medium and high risk qualitative assessments for resilience.	Closed
59	Will the SDB investment model (WISDM & DMU) be able to pull out why decisions were made and help customers to see how the least cost option has been built?	ISG	Feb-18	The models provide amongst other things the least cost options given the constraints we set (e.g. climate change, leakage reduction, metering penetration). We can then demonstrate why schemes have been chosen. It is important to realise that the model aids decision making in an uncertain future - it doesn't give 100% confidence in an uncertain world, but it helps us make 'least regrets/low regrets decisions. Steven Wade has reviewed our approach and is comfortable that it is reasonable.	Closed
60	In relation to the SDB programme it should be clear what schemes will be delivered and when schemes are being planned/ scheduled, when explaining the approach to programme level optioneering	ISG	Feb-18	We have identified our AMP7 and AMP8 projects and are working through our 'in-AMP' programme. These are included in WINEP3 and include completion dates. As we undertake the detailed feasibility of our projects we will develop a more detailed project sequencing plan.	Closed
61	For innovation; emphasise how the company is thinking about innovation in the chosen options	ISG	Feb-18	Our selected solutions are still at 'desk study' level detail so technology innovation is still being considered. Our PR19 plan will contain an Appendix on how we have exploited innovation to date and our business cases will cite our track record in each specific area. Learnings are being fed into each business case (e.g. WFD compliance at sewage treatment works with Low P consents) At March and April meetings, we showed some examples of innovation within the 'Security', 'WFD & UWWTD –CSOs' and 'WFD & UWWTD –Severn Trent's' strategic investments.	Closed

## Investment Sub Group challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
62	WFD & UWWTD: The options lacked clarity and likely impact for bills. The company should review and show costs / impact on bills of options relation to 'No deterioration' and 'No deterioration plus', across AMP7 and AMP8 so that it could be demonstrated what saving were available by doing investment once only as opposed to two separate occasions	ISG	Feb-18	Slides were presented to ISG in April to summarise the investment planning process and cost-benefit impact of optioneering in 'WFD & UWWTD – Sewage Treatment Works' strategic investment. This is a process developed with the Environment Agency and has resulted in WINEP3. We now have a list of mandated obligations. All projects included in WINEP3 are cost beneficial (using either the EA metric our Severn Trent's metric [based on WtP]). Slides were presented in April to ISG to show two examples of 'No Deterioration' investment followed by 'Improvement' versus 'Improvement only' investment, and how the two solutions impact on costs and benefits.	Closed
63	Security proposal; provide AMP6 planned investment v platform for AMP7	PQ	Mar-18	In AMP6 we planned to invest c£25M on SEMD work adopting the recognised prescriptive approach. By the end of AMP6 will predict our investment to be c£50M using our innovative risk based approach (which saves c£25% against prescriptive approach). In AMP7 we are currently forecasting c£80M investment for physical improvements (using our innovative risk based approach)	Closed
64	Security proposal; provide more clarity on residual risk for Severn Trent and for Customers linked research findings (inc source) to proposal and the bill impact of the work	PQ	Mar-18	Given the current CPNI/DEFRA guidance we consider our High Priority National Infrastructure sites carry an intolerable risk exposure (to terrorism/hardened criminals). Post-investment this will move to tolerable (with residual risks still present) with for example, better detection, monitoring, access/egress systems.	Closed
65	Security proposal; what would an further option of RBA + (say) 10% look like - what would customers get for the extra investment	BD	Mar-18	We are adopting a risk based assessment view of improvements to our High Priority National Infrastructure sites. Delivering an extra 10% improvements will mean moving to lower risk (non-HPNI) sites - we do not believe this is appropriate in this AMP - at this stage DEFRA are signalling this requirement for AMP8. In April 2018, we shared with the ISG how the Security case impacts on customer bill and the Line of Sight between the investment and customer preferences.	Closed
66	Security proposal; can you provide benchmark investments for other companies given their proposed programmes	BD	Mar-18	We have sought views from other companies but have been unable to access any meaningful reliable data. UUU/YWS/Thames and ourselves are the main companies who are required to adopt Protective Security Guidance on our High Priority National Infrastructure sites (as we carry the majority of the stock of these assets).	Closed
67	Security proposal; present your RBA in a more positive light.	BD	Mar-18	More prominence will be given at every opportunity	Closed
68	Demonstrate how customer protection (including challenging targets) for each of the investment proposals will be built into the Plan.	ISG	Mar-18	ODI/PC group have reviewed the customer protection proposals in March 18 with no negative feedback. Proposals shared with ISG in April. Penalties will be proposed to ensure customer protection as part of our final plan.	Closed

## Investment Sub Group challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
69	Improve slide 17 - WFD Improvement Programme, from March pack - clarify	ISG	Mar-18	We are confident that there will be more intervention work to do beyond AMP7 following completion of our WFD investigations on the remaining water bodies that require investigations. However Ofwat are highly unlikely to sanction funding for non-evidenced based work. Additionally the EA will not agree to inclusion in WINEP3. Given our historic programmes this is a small number compared to what we have done previously. We are developing an ODI to support early delivery of AMP8 interventions. Slides were shared with ISG in April 2018 to clarify how many CSOs are expected to require intervention by 2027 and why we are confident in our capability to deliver the programme within the established timeframe.	Closed
70	How will we secure appropriate customer protection for our CSO intervention work when the scope isn't clear	PQ	Mar-18	ODI/PC group have reviewed the customer protection proposals in March 18 with no negative feedback. Proposals shared with ISG in April. Penalties will be proposed to ensure customer protection as part of our final plan.	Closed
71	How will we make sure the Stoke catchment work is holistic in its nature	BD	Mar-18	WINEP3 contains a number of standalone projects associated with Stoke. We have agreed to deliver the majority of the project across AMP7 and AMP8. We will look to phase any flooding, pollution, maintenance, rehabilitation work during the main investment project to deliver a catchment solution	Closed
72	Slide 28 UWWTD Investigations from March pack - amend wording to clarify how we have responded to Customers	PQ	Mar-18	We have summarised all customer research and brought it together in a Line of Sight document to show how we have responded to Customer views. Presented at April ISG.	Closed
73	Will the Assurance process address the challenges raised by the ISG and WF. How does this process support and inform/involve customers so that it is transparent? Request for Jacobs to present their findings	BD	Mar-18	Confirm Assurance feedback approach at Water Forum so we have a common approach across all sub-groups. The process has been discussed by the Chair of the Audit Committee and Head of Compliance at the main meeting. The Jacob's letter has been shared prior to submission of the report and the report includes a company comment on the letter to summarise.	Closed

Performance Sub Group challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
1	On framework for developing a long list of PCs - Water Forum broadly agree with the principles underpinning the framework and the proposed approach to developing a long list of performance commitments (PCs) areas of change proposed were: “that the measure should be at least in part controllable”. Severn Trent should consider having the principle modified to cover areas they can influence as well. On principle – “ensuring there is no overlap between measures”. Severn Trent should consider areas which drive multiple benefits. On principle – Measurable, verifiable and comparable ..It is important Severn Trent consider a principle of having a robust baseline for each measure and an assessment process for Water Forum.	Sub forum	Oct-17	We agree and have modified the principle accordingly. In our AMP7 plan we currently have measures like Partnership Working on Flooding where to achieve the outcome, influencing and working with stakeholders is a core requirement. We agree and a key challenge area for the Water Forum will be to ensure our 19/20 forecast on measures is robust. We need to work with the forum to outline a process by which we provide confidence in this area. This could be through sharing assurance outputs, and subject matter expert sessions – Process to be agreed with Forum in upcoming sessions. 27th Oct Man forum slides updated accordingly.	Closed
2	On our methodology for developing PCs – Water Forum would like Severn Trent to produce and share “driver diagrams” on the measures of success which underpin delivery of outcomes.	Sub forum	Oct-17	We agree to be added to future agenda, looked at on 30th Nov meeting.	Closed
3	On having PCs that reflect collaborative and innovative ways of working – Severn Trent should explore how they use the learning from the current catchments they lead on as part of the CaBa work	Sub forum	Oct-17	We agree and will explore. Approach noted; learning from CaBA catchments has been incorporated into our biodiversity and farming for water Performance Commitment.	Closed
4	On use of comparative data - Water forum agree that back casting data over a 10 year period on the new/ consistency measures will be resource and time intensive and hence not feasible. The current proposed pragmatic approach to use variations based on 16/17 and 17/18 data should form a starting point to developing the historical data to develop targets. This can be further debated as the data is shared.	Sub forum	Oct-17	Approach noted.	Closed
5	On defining UQ2024/25 - Sub Forum’s view was that this will be challenging given lack of guidance from Ofwat on methodology that companies should use to calculate UQ and the lack of historical data and other companies forecasts for 19/20. CCWater have raised this with Ofwat	Sub forum	Oct-17	We acknowledge that this will be challenging. We have outlined an initial approach on how we intend to understanding UQ as presented in the October session. Further discussion in April session	Closed
6	On the criteria for short listing PCs - No challenges currently but Severn Trent should demonstrate the use of the criteria in short listing PCs to the Water Forum so they can see how it is applied in practise	Sub forum	Oct-17	Approach noted.	Closed

Performance Sub Group challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
7	On company measures and targets - Water Forum need the time and opportunity to challenge Severn Trent on their measures and targets (key lesson learned from PR14).	Sub forum	Nov-17	It was agreed that the publication of the final methodology in Dec with outputs from horizontal audit in March was very tight for all companies – particularly Severn Trent if we aim to submit early. Company agreed it was important to give the Water Forum confidence as this moves forward.	Closed
8	On AIM customer research - questioned value in undertaking research with customers if they did not understand	Sub forum	Nov-17	While we understand the issues, it is important to show that we had spoken with customers (even if at a high level related to site prioritisation rather than specific sites)	Closed
9	On customer view methodology - is it suitable to put the Trade-off research within the same basket as the customer views on developing PCs with four key outcomes?	Sub forum	Nov-17	It is important that we keep all reports together to obtain the widest optics on all research. This is the groundwork we will use to triangulate.	Closed
10	On double investing - challenged company to ensure that company was not doubly investing in both catchment management and additional schemes but that they were complimentary	Sub forum	Nov-17	Agreed. We would check to make sure that we were not doubly investing	Closed
11	On wording on Outcome 1 - challenged used of the wording 'psychological needs' when talking about aesthetics.	Sub forum	Nov-17	Agreed to look at the wording.	Closed
12	On drought restrictions - challenged the Drought and Restrictions research slide (p20) which showed customers were less averse to hosepipe bans and standpipes. Challenge on clubbing hosepipe bans and standpipes together as they are quite different. Challenged the company not to 'message' what customers were saying but to 'write down what they say'. Challenged that Frontier Economics may have been asking the wrong questions.	Sub forum	Nov-17	We agree there is a difference between the two and that these were not presented together in the deliberative research, but rather as part of the impact on consumers in a "drought storyboard", i.e. a timeline of events in which the situation gets progressively worse and the impact on customers gets more severe. We accept the challenge that WTP research is not best placed to explore aspects such as the risk of requiring standpipes hence why we explored drought in the deliberative research. We had planned full day "immersive" research on drought however given the change in the investment proposed we explored it as part of the supply demand deliberative research.	Closed
13	On speed of response PC - agreed that 24 hours may not be appropriate but this is an area that is likely to cause angst for customers hence company should explore retaining measure, better communications and time of response. This would also be important to demonstrate to customers that leakage is a key priority.	Sub forum	Nov-17	Highlighted that Britain Thinks research indicated 72 hours was a timeframe by when customers generally expected resolution of their issues. The company will review the measure with a view to outlining suitable timeframe and level of compliance	Closed
14	On short term supply interruptions - challenged that company needed to plan for more joined-up working with local authorities for such incidents.	Sub forum	Nov-17	There is joint working sessions that Severn Trent undertake with Local Authorities and other partners. Company will incorporate joint working in their delivery strategy	Closed
15	On water pressure - do pressure logs gave us an accurate reflection on water pressure issues. Advised that people would be willing to pay more for improved pressure.	Sub forum	Nov-17	Already looking at issues around water pressure which is an issue for customers, and how to improve it. Severn Trent is however already working at above the legal requirement of 15 metres head.	Closed

Performance Sub Group challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
16	On Environment outcome - use of the word 'partnerships' is too vague. It needs more to be more granular.	Sub forum	Nov-17	have done outcome changed to thriving environment	Closed
17	On driver trees – challenged layout of materials. New diagram proposed	Sub forum	Nov-17	Agreed to look to produce a different presentation on the driver trees	Closed
18	On mains bursts PC - should it be the 'response to mains bursts' rather than the 'number of mains bursts'? Is mains bursts actually a good indicator of asset health?	Sub forum	Nov-17	Severn Trent agree it is not the best asset health measure but mains bursts is defined by Ofwat and is a secondary measure	Closed
19	On sewer flooding PCs - should these be a combined sewer flooding measure	Sub forum	Nov-17	Internal sewer flooding is an Ofwat primary measure hence it needs to be reported. Customer views and WTP also indicated that a separate measure would be suitable	Closed
20	On blockages PC - Severn Trent should retain sewer blockages currently. Open to debate on whether they should focus on misuse causing blockages but there is a risk that asset issues are not addressed and there could be reporting issues	Sub forum	Nov-17	Agreed sewer blockages retained in our final suite of 35 PCs	Closed
21	On serious pollution incidents PC – the EA would expect to see this as a measure.	Sub forum	Nov-17	Acknowledge EA's challenge, serious pollutions is included in the total pollutions commitment	Closed
22	On Birmingham resilience – should Severn Trent consider having something in case the project is not finished in AMP6?	Sub forum	Nov-17	Ofwat will roll forward penalties for delay beyond AMP6	Closed
23	On sites will eel protection – EA would expect to see this if there are eel sites within the WINEP.	Sub forum	Nov-17	Severn Trent will check the latest WINEP to see if any eel sites are included	Closed
24	The Water Forum would like more clarity from Severn Trent on how the list has evolved with changes made since the main meeting and for these to be clearly signposted	Sub forum	Feb-18	Severn Trent agreed and confirmed that the list had evolved and that ST would provide the Water Forum attendees with this list by 12th February. Severn Trent also suggested that following emailing out the list, it would be constructive for him to arrange 1 to 1's with the WF sub group members for further discussion ahead of the next subgroup meeting on 1st March.	Closed
25	The assurance process was challenged by asking if the Water Forum were expected to provide assurance or if Severn Trent would be showing them the assurance process that they had undergone in order to provide the final assured numbers.	Sub forum	Feb-18	Action agreed to circulate and assurance scope shared with forum on 1st March session	Closed

Performance Sub Group challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
26	The key assumptions data was challenged and Severn Trent were asked if the company was going to consult individual subgroup members on these. It was raised that the company should check the methodology to consider any uncertainty in the use of percentage changes and where Ofwat are commenting on the use of three year moving annual average for metrics.	Sub forum	Feb-18	Methodology published in Dec confirms 3 year average to be used for leakage and pcc	Closed
27	On the customer consultation in February - what questions were put to the customers in regards to measures, considering they are not yet fully defined.	Sub forum	Feb-18	Severn Trent responded to the challenge to note that both qualitative and quantitative research had been undertaken. Quantitative research asks customers if they support ODIs and the majority confirmed that they were in support of a ±£15 bill impact. The qualitative research explored the concept of overperformance and underperformance payments	Closed
28	On the scope that the choices research will cover - it was noted that Nick Baker (NB) had approved the scope for choices research but the sub group would like to see questions for the quantitative research for social tariffs. It was noted that they would still like to see the output noting that CCWater is a key consultee in this area.	Sub forum	Feb-18	The choices questionnaire was shared with the research sub group and feedback from Bernard Crump was incorporated in to the final questionnaire. Nick confirmed that with a high calibre research agency the cognitive overload for respondents would not be too much.	Closed
29	The company should demonstrate that they are not reducing progress against certain measures to result in a lower starting point for 19/20. When the company should be looking at forecast in comparison to what they are currently doing	Sub forum	Feb-18	Severn Trent responded to this challenge by providing assurance that the pace had not slowed down and that the company was looking at actuals and will build these into the forecast. The response was supplemented by noting the Ofwat service delivery report where a year on year improvement can be seen. Overall the concerns were noted.	Closed
30	The company needs to specifically state how ODI over performance is being built in and this needs to be made clear.	Sub forum	Feb-18	Severn Trent responded to these challenges and noted that there is a need to state how building our ODIs and performance setting pay in 19/20 needs to be clear. Led to action to make this clear on the next iteration of slides	Closed
31	The explain the company's clear audit process	Sub forum	Feb-18	Severn Trent responded to the challenge and took an action to provide the WF members with the audit process and timeline.	Closed
32	To be clear on which PCs that it wanted guidance from the WF members on.	Sub forum	Feb-18	Neerja to send out a list and SW to confirm which WF members are to focus on which areas	Closed
33	The Resilience PC and drought and flood risk resilience PCs seem unclear so more clarity should be provided.	Sub forum	Feb-18	The company noted the challenge and MG stated that for the drought and flood risk resilience PC, one company had already questioned it and highlighted that the risks and definitions had changed. Update to be emailed.	Closed
34	There was not enough evidence of vulnerability so this would need to be made more evident	Sub forum	Feb-18	It was noted that vulnerability would be covered with the Retail subgroup but that an update could be shared if required with the PCs/ODIs subgroup. An update to be sent out on service vulnerability to all attendees.	Closed

Performance Sub Group challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
35	The company should ensure that it is outcome focused and that it was important to look at risks.	Sub forum	Feb-18	This challenge was noted and Severn Trent was encouraged by the dialogue between Ofwat and the DWI. It was added that there was an expectation for there to be a lot of catchment management conversations happening and that the company is doing more than the sub group are aware of. There was a lot more opportunity in this space and that the DWI should be kept up to date.	Closed
36	The company needs to demonstrate the application of triangulation and how this relates to incentives	Sub forum	Feb-18	This led to the action to arrange 1 to 1's with each WF member before March and to make clear the distinction between definitions and target setting.	Closed
37	In regards to public sewer flooding – support for the response and inclusion of the measure. Group requested assurance on how Severn Trent separates hydraulic flooding and flooding	Sub forum	Mar-18	Severn Trent responded to the challenge by noting that there was robust modelling assessment and CCTV monitoring to support this and that once assurance was complete, this would be shared with the members.	Closed
38	On partnership working – as per the minutes, the company needs to respond to the Jan challenge regarding if this is supported by customers.	Sub forum	Mar-18	The company is to respond to this by reflecting customer views in the Compendium	Closed
39	With regards to the Education title – would it be better to call it Engaging future customers?	Sub forum	Mar-18	Output from sub group noted by Severn Trent	Closed
40	With Education - what are we doing to engage and education other customers? Given the importance of this activity from the customer research how will Severn Trent reflect this in what it does – will it be via another specific PC? Included in the driver trees? The company needs to show how it captures wider engagement	Sub forum	Mar-18	In regards to engagement, Severn Trent noted that it would be useful to show this via the drivers and the decision making tree.	Closed
41	For Lead - the tone needs to be considered to mitigate the notion of this being a health scare	Sub forum	Mar-18	Severn Trent noted that the intention on this PC was clearly for the good but to ensure that the communication strategy was clear.	Closed
42	With reference to Lead Target setting – the company needs to be clear and take into account the complexity of the area	Sub forum	Mar-18	The company would be proposing reducing lead for customers at highest risk. The appropriateness of the metric would need to be considered and the company welcomed views from the WF members.	Closed
43	Challenge to show the testing of the results with qualitative research	Sub forum	Mar-18	Severn Trent would consider how it would qualitatively test its results.	Closed
44	The company should test the cognitive validity of the WTP research – this should include assessment of distribution of results with a focus on low pressure, bioresources and category 3 pollutions and other assurance that can be provided on cognitive understanding	Sub forum	Mar-18	Led to action where the company would investigate the issue of cognitive understanding in WTP and gain commentary from having it peer reviewed. The results of this would be distributed. The WTP results were demonstrated as having a log-normal distribution	Closed

Performance Sub Group challenge log

No	Challenge	Raised by	Date raised	Company response	Open/Closed
45	The company should consider whether it can take absolute WTP to infer priorities (i.e., before unitisation)	Sub forum	Mar-18	Meeting concluded that it would be good to get agreement on valuations in the March main WF meeting.	Closed
46	For the valuation on supply interruptions the sub group ask the company to consider the values from contextualised research and the new research results that will be coming out	Sub forum	Mar-18	Incorporated revealed preference study results into final triangulated WTP value, with approach to triangulation agreed with sub-group	Closed
47	On River Water Flow - Investigate whether we can disaggregated the PC between quality vs flow (yes or no)	Sub forum	Mar-18	The company has acknowledged the request and said that it would be fairly straightforward to have entirely separate flow and quality PCs; given majority of the points related to a quality PC we will continue to use a single PC	Closed
48	On River Water Flow - Show the difference in incentive rate between PR14 and PR19 and then bring more qualitative evidence on customer views (i.e., in line with earlier point)	Sub forum	Mar-18	Incorporated revealed preference study results into final triangulated WTP value, with approach to triangulation agreed with sub-group	Closed
49	Run the Water Framework Directive – Cost Benefit Analysis using min/max WTP	Sub forum	Mar-18	This was presented by a subject matter expert in the sub group to the members.	Closed
50	On Using Choices for Valuations there was an agreement that it is right to exclude outliers from this process - how we reconcile this with overall WTP	Sub forum	Mar-18	Agreed with sub-group that triangulated WTPs, if not excluded as an outlier, would be revised in proportion to the Choices results	Closed
51	ODI Design - define extreme weather events (ideally using WRMP)	Sub forum	Mar-18	Extreme weather penalty collar for supply interruptions set at limit of 17/18 performance (a very challenging year). Internal and external sewer flooding collars set at 1% of RoRE. Both approaches agreed with sub-group	Closed
52	ODI Design - caps and collars should be symmetrical unless it is possible to justify why not	Sub forum	Mar-18	Justification for not having reward caps agreed with sub-group for extreme weather. Not only does extreme weather always fail to have a positive effect on performance, but both interruption duration and internal/external sewer flooding are bounded by zero.	Closed
53	ODI Design - In regards to super stretch incentive rates, articulate the symmetry/asymmetry of rates	Sub forum	Mar-18	Super stretch rates shown to be asymmetric, in that a larger performance change is needed to achieve enhanced rewards than would see enhanced penalty	Closed
54	On results for low pressure complaints – understand concerns on data, but consider if it could be reputational for 3yrs, financial for 2yrs	Sub forum	Mar-18	Challenge noted: persistent low pressure proposed as a PC	Closed
55	Define specific parameters Severn Trent are going to test & Run the financial consequences for Asset Health	Sub forum	Mar-18	Asset health scenarios tested with results shared at May forum	Closed
56	On PCs for strategic investments - for the security measure ask Defra/Ofwat on how to measure this, but group wasn't concerned about the protection element a consider reputational damage is very high if we cannot deliver this outcome	Sub forum	Mar-18	This has largely been addressed and dealt with in the Investment Sub Group. Extensive detail can be found in the Investments log and this information was shared across all sub groups.	Closed
57	The company should explain what is causing bursts to be a challenge	Sub forum	Mar-18	It was concluded that the company would send out a brief explanation to the members for further clarity.	Closed