

Bristol Water Challenge Panel Annual Report 2017/18

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FOREWORD

Welcome to the 2018 Annual Report of the Bristol Water Challenge Panel

Bristol Water, like every water company in England and Wales, is entering one of the most important stages in the development of a new five-year business plan for the period 2020 to 2025. Hence, during the year 2017 to 2018, the work of the Bristol Water Challenge Panel has focused primarily on three issues.

These are ensuring that Bristol Water:

- understands the priorities and preferences of its diverse customers,
- Increases and strengthens the depth of dialogue between its decision-makers and its customers to understand what matters most to them and
- listens to how customers will select between limitless options available to determine the types of service they want from Bristol Water and how much they are willing to pay for it now and in the future.

In order to ensure that Bristol Water's business planning is fit for purpose, the Challenge Panel has encouraged Bristol Water to root its research and consultation within the context of water as a scarce yet essential natural resource, of maintaining and improving the natural environment surrounding water catchment areas, of addressing the needs of its most vulnerable customers and of providing a resilient water distribution network. We encouraged Bristol Water to be as innovative as possible during its research phase as well as in finding the solutions customers want by improving services in a cost-effective way. Needless to say, we also scrutinised the company's 2017

to 2018 performance against the promises made in its last five-year review.

The Challenge Panel contributed to the design of the research programme to find out answers to the key issues above. We needed to make sure that when customers discussed their priorities, preferences and responsibilities regarding the level of service they wanted from Bristol Water that they:

- knew enough about the water they drink, clean with and use every day
- could ask about the things they lacked knowledge on
- could identify areas where they could take on responsibilities, were charged more fairly for the amount of water they use and much more besides.

When you realise that most people only think about the water when a problem arises, the Challenge Panel encouraged Bristol Water to provide a broad context for the research and respond to customer requests for more education on the subject. Participants in the research were surprised by how important water is to them. Customers wanted more information on how valuable and scarce water is, what both customers and companies could do

to reduce leakage and waste, how to use water efficiently and whether the company looks after people that genuinely have trouble paying their bill. To assist with its analysis, Bristol Water developed 6 customer types to describe the diverse, urban, rural, young or old customer-base across our region.

Having carried out the research and analysed the results, the Challenge Panel ensured that the needs, wishes and interests of its customers remained uppermost as decisions were made by Bristol Water regarding its investments, network and operation. Bristol Water improved its methods for obtaining customer comments as it crafted its long-range strategy and its water resource management plan.

The Challenge Panel thanks the many customers that participated in the research on which the 2020 to 2025 business plan will be developed and the Bristol Water management for taking on board the challenges and scrutiny made by its voluntary Challenge Panel members.

Peaches Golding OBE
Independent Chairman,
Bristol Water Challenge Panel
August 2018



EXECUTIVE SUMMARY



The Bristol Water Challenge Panel provides assurance to the economic water regulator Ofwat that Bristol Water has incorporated the preferences and priorities of customers in its business plan for the period 2020 to 2025.

The Challenge Panel is independent from both Bristol Water and Ofwat and maintains relationships with these organisations as well as other regulators of the sector. This report details the scrutiny and challenge provided by the Challenge Panel during 2017/18 regarding the delivery, plans and proposals of Bristol Water.

The range of discussions taking place in Challenge Panel meetings were extensive and provide an opportunity to understand how Bristol Water is taking into account the concerns and interests of its customers as it carries out its day-to-day activities and plans its future investments. The Challenge Panel records the challenges it makes to Bristol Water and receives comments back from the company on what has happened as a result of such challenge. This register, among other documents, provides an important part of the assurance the Challenge Panel gives to Ofwat on how well Bristol Water addresses and responds to its customers, both present and future, and will be published in our final report in September 2018, which will accompany the Company's Business Plan. A breakdown of challenges raised during the period, by source and topic, is included.


The Challenge Panel has taken the opportunity to refresh its membership during the period and thus continues its ability to challenge Bristol Water in the areas of interest to Bristol Water customers. A new Skills Audit is not required as the new members have the same skill sets as those leaving us. A list of members at the end of the period is included.

The Challenge Panel has used its Aide Memoire during meetings to guide our challenges and thus respond to Ofwat's expectations of our role. This has been supplemented by the Aide Memoire suggested to Customer Challenge Group Chairs by Ofwat.

In examining how the company carries out its day to day activities and how this performance compares to that of other companies in the water sector, the Challenge Panel questions and challenges the assurances provided by Bristol Water's Technical Assurer. In order to carry out such sensitive and technical assessments, it is essential that both the Challenge Panel and the company have mutual trust and respect and that the customer can be confident in the rigour of the challenges made. The detail of this important

workstream provides assurance that Bristol Water has the right systems, processes and records in place to meet its promises to customers and plan its future services. This examination is carried out by a sub-group that reports to the Challenge Panel any challenges made to Bristol Water.

The Challenge Panel is pleased to note that Bristol Water has continued its good start in delivering its commitments to its customers and in making progress from the prior reporting period. The Challenge Panel was satisfied the water supply is resilient and water quality meets the high standards required by the water quality regulator, the Drinking Water Inspectorate. The company has reduced the number of customers at risk of asset failure, reduced the number of negative water contacts, reduced the number of negative billing contacts and reduced the percentage of customers in water poverty. The Challenge Panel notes and accepts the company's explanations why certain performance commitment targets were missed or where performance slipped from the previous year. A detailed analysis of the subset of indicators that raised concerns regarding the water service is provided.



The Challenge Panel notes that Bristol Water has robustly looked at data that come from third parties, particularly from its contractors, and has improved the ownership of such data within the company and such data are subject to internal checks.

The Challenge Panel notes the extensive work that has gone into developing and implementing the Customer Engagement Policy by both Bristol Water and the Challenge Panel's customer engagement sub group members and it is pleased that the policy has been adopted. We note the extensive use of current customer contact data now being used and look forward to receiving future updates on the progress of customer engagement throughout 2018.

In the run-up to the production of the final business plan, the Challenge Panel will focus on how aware the company is of what its customers want and expect from the water company and how it has acquired and interpreted customer feedback in order to reach its performance promises for the business plan period.

On submission of the final business plan, the impact made by the Challenge Panel through its scrutiny and challenge will be fully apparent in the company's business plan. The Challenge Panel will simultaneously submit its final report for the current five-year business plan.

INTRODUCTION



The independent Customer Challenge Group for Bristol Water is known as the Bristol Water Challenge Panel. The Challenge Panel's role is to monitor, scrutinise, challenge and report on Bristol Water's performance against the commitments set out in the final report of the Competition and Markets Authority dated 6th October 2015 and the Ofwat PR14 Final Determination of December 2014.

The Challenge Panel also advises and challenges the company on its customer engagement policies and procedures and it examines how customer preferences and priorities drive decision making and business planning for the

next price review.

This report provides the Bristol Water Board, its customers and Ofwat, with the Challenge Panel's opinion on the company's progress in delivering its performance commitments in the third year of the 2015-2020 price control period. It also provides the Challenge Panel's opinion on Bristol Water's customer engagement activities presented to them during the year and also the company's information assurance regime.

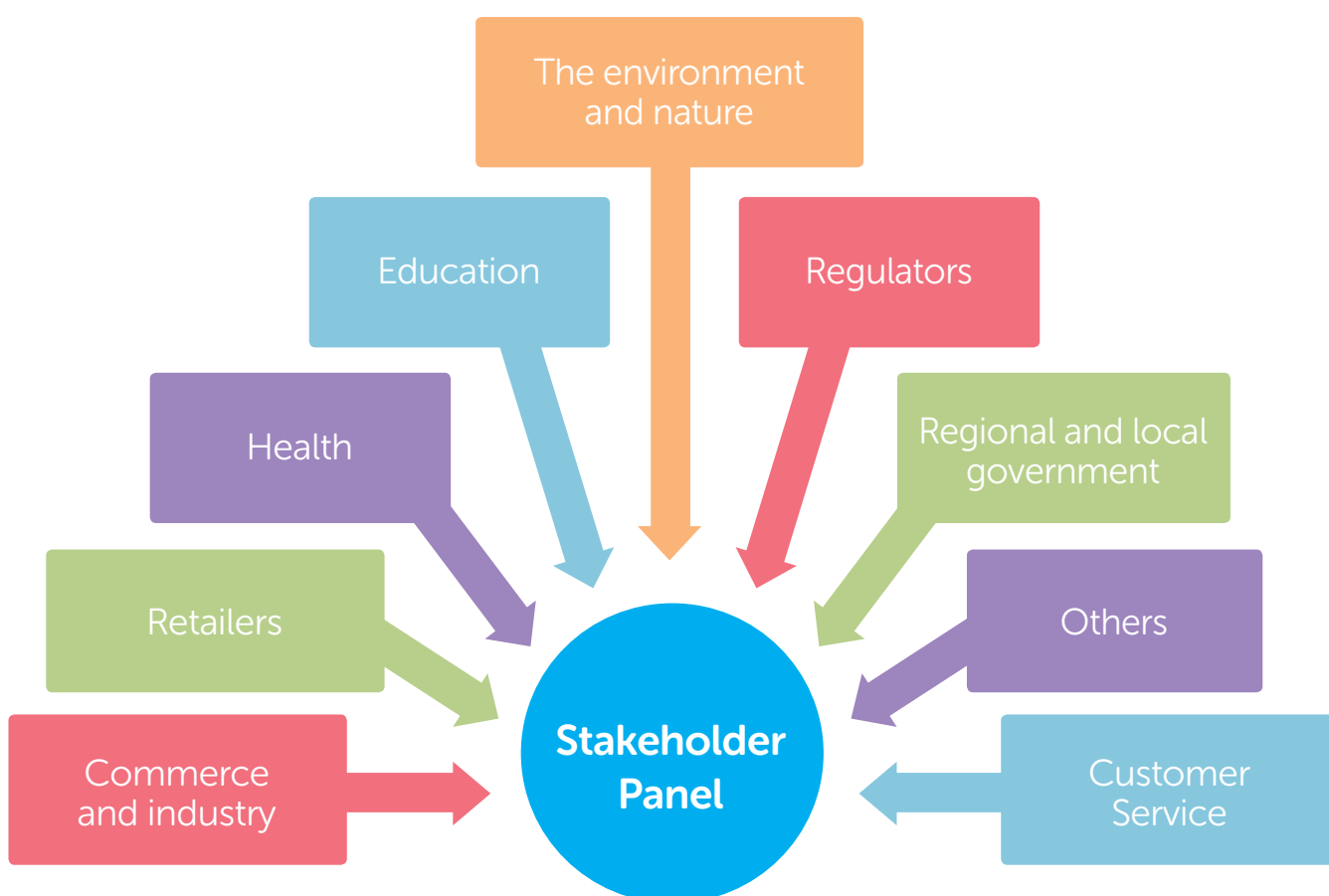
The report also sets out where the Challenge Panel's focus will be in the next 12 months.

The Environment Agency (EA), as a member of the Partnership, supports the views expressed in this report. However, these views will not necessarily influence any subsequent position the EA takes as part of its ongoing statutory and regulatory duties associated with Bristol Water's environmental obligations.

CHALLENGE PANEL ACTIVITIES

Members

The Challenge Panel is composed of an independent chair, deputy chair and report writer, together with the environmental regulators and individuals drawn from several backgrounds, as shown in the diagram below.



During the year our member from Citizens Advice resigned due to increased workload but we were fortunate to recruit a representative from StepChange to provide a similar set of skills. Also, our member from Bristol City Council resigned on her appointment to the Council Cabinet and was replaced by a Mendip District Councillor who was a member of the Challenge Panel's

predecessor for Periodic Review 2014.

For the period of the Ofwat Methodology consultation a developer of water services assisted the Challenge Panel.

A full listing of the Challenge Panel members as at 31 March 2018 is given in Appendix 1

Skills Audit

A full audit of the skills of all members in 2016/17 was reported in the Annual Report for that period. As the new members have the same skills set as the members they replaced there is no requirement to repeat the Skills Audit.

CHALLENGE PANEL ACTIVITIES CONTINUED

Meetings

The Challenge Panel has reviewed and challenged Bristol Water policies on Customer Engagement and Customer Assurance during the year. The Challenge Panel has received presentations on Bristol Water's performance during the year and has taken the opportunity to challenge Bristol Water. The review of Bristol Water's end of year performance is presented later in this report.

The Challenge Panel has become more involved with the work towards the preparing Bristol Water's Business Plan in advance of the plans submission to Ofwat in September 2018. This is shown in the number of meetings held, as shown in the table right along with the topics covered in each meeting:



Customer Engagement Sub-Group	4 April 2017	<ul style="list-style-type: none"> • Customer Engagement • Resilience • Vulnerability
Challenge Panel Meeting 7	17 May 2017	<ul style="list-style-type: none"> • Bristol Water Performance • Triangulation • Customer Engagement
Customer Engagement Phone-in	17 May 2017	<ul style="list-style-type: none"> • Asset Health Performance Commitments • Water Resources • Environment • Triangulation • Customer Engagement
Environment Tripartite Meeting	1 June 2017	<ul style="list-style-type: none"> • Periodic Review 2019 • Drought Plan • Water Resources Management Plan • Environmental Performance • Resilience
Customer Engagement Phone-in	7 June 2017	<ul style="list-style-type: none"> • Environment • Resilience • Water Resources • Customer Engagement
Customer Engagement Sub-Group	6 July 2017	<ul style="list-style-type: none"> • Customer Engagement • Triangulation • Water Resources
Challenge Panel Meeting 8	12 July 2017	<ul style="list-style-type: none"> • Customer Engagement • Environment • Information Assurance • Triangulation • Vulnerability • Bristol Water Performance • Water Resources
Assurance Sub-Group	21 July 2017	<ul style="list-style-type: none"> • Information Assurance
Environment Tripartite Meeting	6 September 2017	<ul style="list-style-type: none"> • Periodic Review 2019 • Drought Plan • Water Resources Management Plan • Environmental Performance • Resilience
Customer Engagement Sub-Group	22 September 2017	<ul style="list-style-type: none"> • Customer Engagement • Drought Plan Engagement • Triangulation • Vulnerability • Strategy

Customer Engagement Sub Group	19 October 2017	<ul style="list-style-type: none"> • Vulnerability • Strategy
Customer Engagement Sub Group	31 October 2017	<ul style="list-style-type: none"> • Triangulation
Challenge Panel Meeting 9	24 November 2017	<ul style="list-style-type: none"> • Bristol Water Performance • Tariffs • Triangulation • Customer Engagement • Water Resources
Environment Tripartite Meeting	4 December 2017	<ul style="list-style-type: none"> • Periodic Review 2019 • Drought Plan • Water Resources Management Plan • Environmental Performance • Resilience
Customer Engagement Sub Group	8 January 2018	<ul style="list-style-type: none"> • Triangulation • Information Assurance • Customer Engagement
Performance Commitment & Outcome Delivery Incentive Sub Group	8 January 2018	<ul style="list-style-type: none"> • Outcome Delivery Incentives
Challenge Panel Meeting 10	24 January 2018	<ul style="list-style-type: none"> • Outcome Delivery Incentives • Information Assurance • Strategy
Performance Commitment & Outcome Delivery Incentive Sub Group	26 February 2018	<ul style="list-style-type: none"> • Outcomes Framework • Business Plan Assurance • Performance Commitments • Information Assurance
Customer Engagement Sub Group	7 March 2018	<ul style="list-style-type: none"> • Vulnerability • Customer Engagement
Environment Tripartite Meeting	14 March 2018	<ul style="list-style-type: none"> • Periodic Review 2019 • Drought Plan • Water Resources Management Plan • Environmental Performance • Resilience

Challenge Panel members have contributed to the three ongoing subgroups on Customer Engagement, Customer Assurance and the Environment, as well as the new series of meetings on Bristol Water's Performance Commitments and Outcome Delivery Incentives. To enable members to carry out their review in a structured way we have written an Aide Memoire to assist us; a copy was attached to the previous report.

The Challenge Panel looks forward to working with the Bristol Water Board in the future work before the submission of the Bristol Water Business Plan in September 2018.

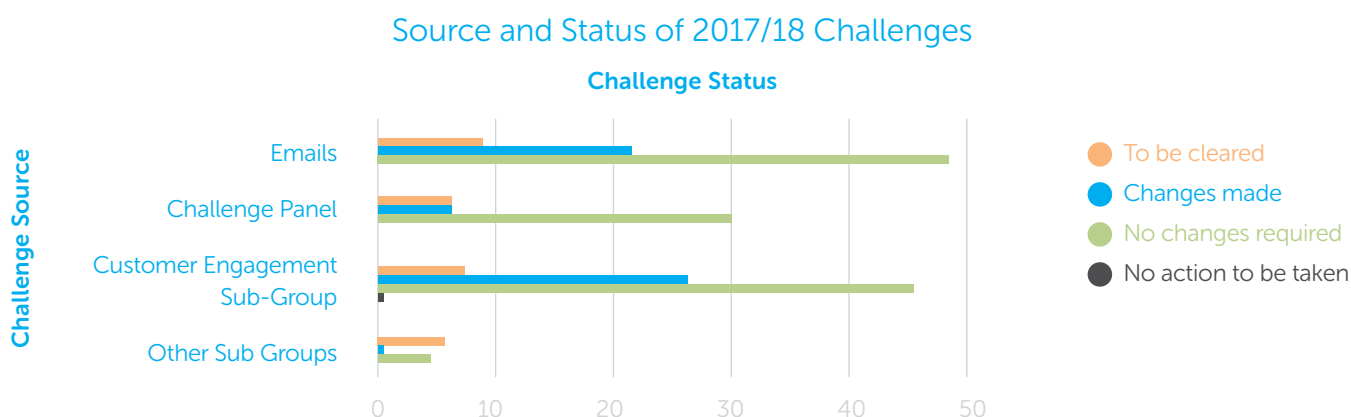
The Chair and Deputy Chair have also attended seminars and workshops organised by Ofwat and others on diverse topics to do with Periodic Review 2019. Challenge Panel members have been kept informed of the topics discussed and any resulting output

The Challenge Panel is grateful to Bristol Water for organising and hosting all the meetings listed above, particularly the Away Day that was held at Bristol Water's Purton Treatment Works, which allowed members the opportunity to tour one of Bristol Water's operational sites.

CHALLENGE PANEL ACTIVITIES CONTINUED

Challenges

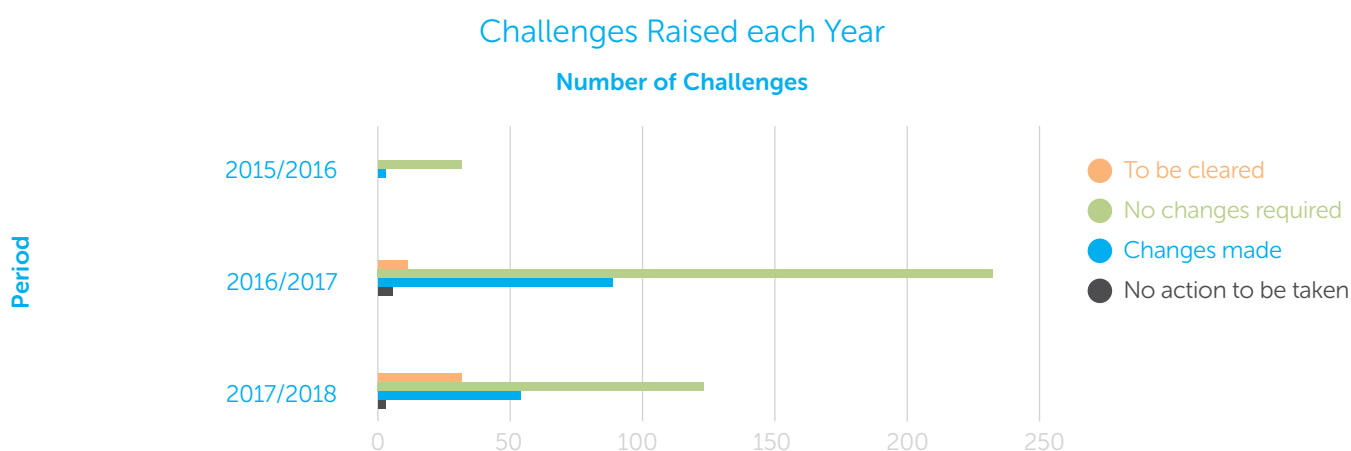
Challenges can arise from emails and any of the meetings in the previous section; the source and status of all 2017/18 challenges are given in the following chart.



Whilst in 2016/17 most challenges arose from emails, in 2017/18 there was almost the same number generated from the Customer Engagement Sub Group meetings. This was caused by the increase in number of Customer Engagement Sub Group meetings and phone-ins from one in 2016/17 to nine in 2017/18.

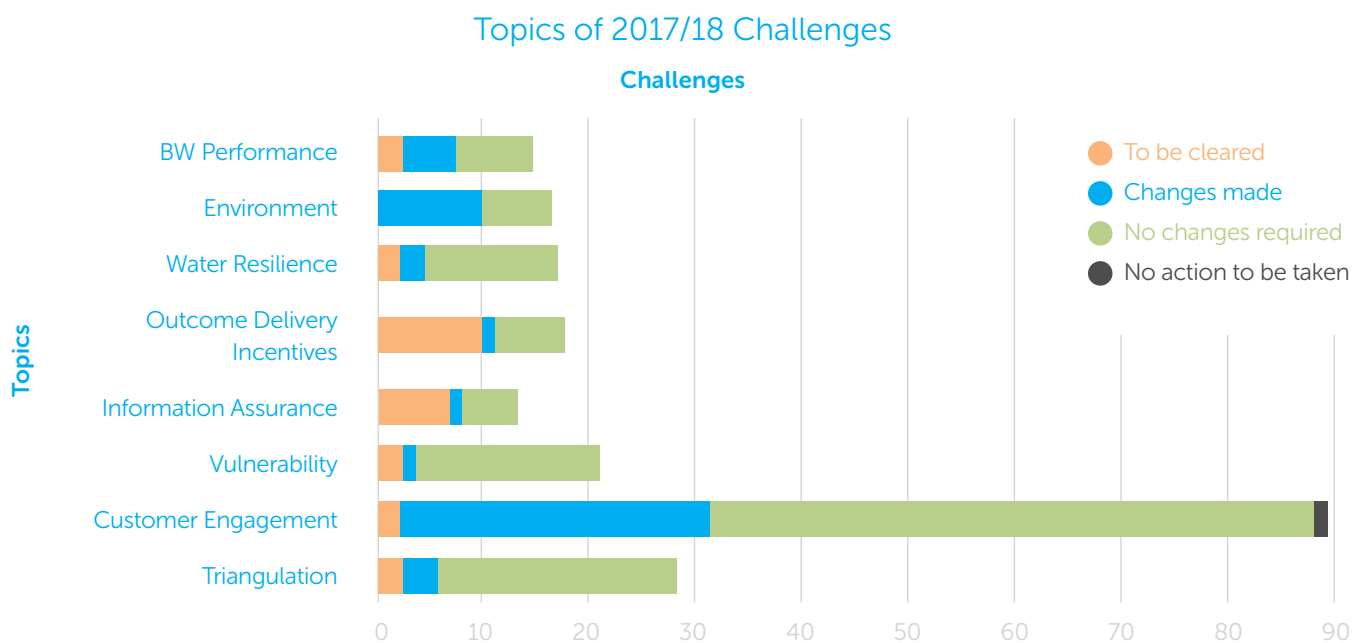
However, the Customer Engagement Sub Group challenges resulted in more changes to Bristol Water intentions than those from emails.

The increased number of Customer Engagement Sub Group meetings enabled greater dialogue between Challenge Panel members and Bristol Water staff, resulting in a greater understanding of the concerns that members were likely to raise. This enabled Bristol Water to take into consideration members' expectations in the design stage of the customer engagement, which resulted in a reduction of the number of challenges the members had to make. This can be seen in the number of challenges raised over past periods as shown below.



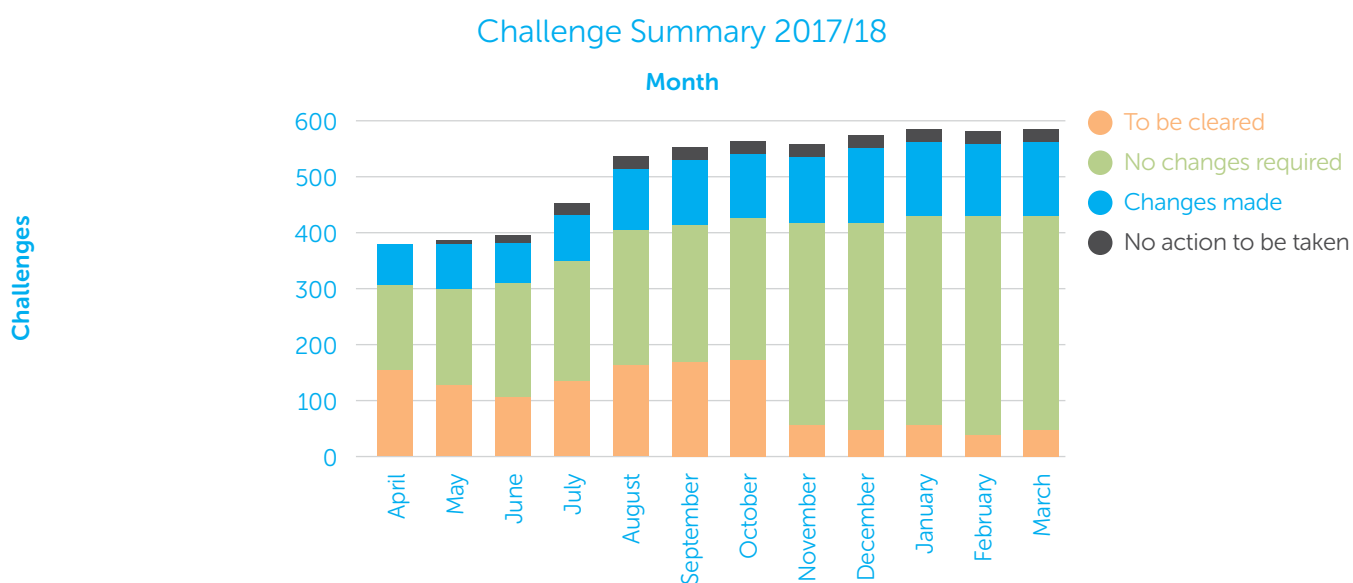
The chart also shows that the percentage of changes made has increased to 26.4% in 2017/18.

The subject matter of the challenges raised during 2017/18 is as follows:



Most of the members' challenges has been on Customer Engagement, but other topics have not been ignored. Most of the outstanding challenges are in Outcome Delivery Incentives and Information Assurance which were the two main topics under discussion at the end of the period.

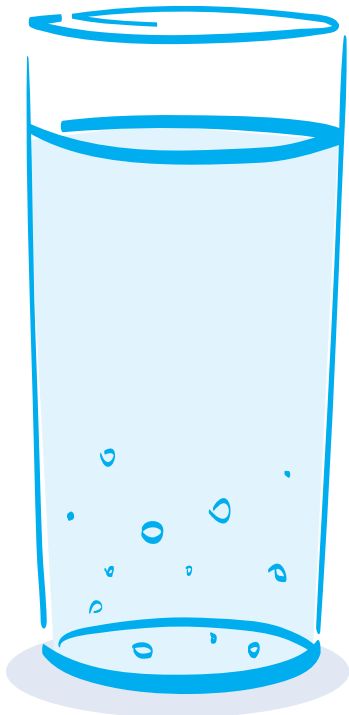
The number of outstanding challenges has reduced during the year being reported on as shown below.



Considerable work was undertaken by members and Bristol Water staff to review documentation to ensure that most of the outstanding challenges were in fact cleared, either with changes made or no changes required. This work will continue into 2018/19 up to the submission of our report to Ofwat.

CHALLENGE PANEL FINDINGS

The company invited scrutiny and challenge from the Challenge Panel on its risk assessments and on its pre-publication draft Assurance Plan.



Information assurance

The Challenge Panel continues to place great importance on the need for Bristol Water to provide its customers with clear, high quality information on its service performance, on billing matters, operational issues and on engagement on its future plans. Customers' trust in the company is heavily dependent upon sound information.

In accordance with Ofwat's requirements Bristol Water analysed the risks, strengths and weaknesses of its reported performance information and updated and published its Assurance Plan during the year.

The Challenge Panel was pleased to see that the risk of reporting poor information is reducing. It considers the company should always be striving to reduce the risk level of all its data items. It asked the company to include more information in its Assurance Plan that sets out what it is doing to achieve this. In response the company included additional information that helped to explain where some of the data items could potentially be improved. In other areas it explained that the risk will always be present due to the complexity and impact of data and in these cases the mitigation and control framework is increased. The Challenge Panel welcomed these additions to the Assurance Plan.

Ofwat's Company Monitoring Framework assessment of the company's information reporting and governance regime for 2017 continues to be 'Prescribed'. The Challenge Panel was pleased to see that the company responded positively to this assessment in order to improve its position. It has taken steps to address Ofwat's concerns about the reporting of performance against its PR14 outcomes, its data assurance summary and evidence from

casework activities. The Challenge Panel will await with interest Ofwat's 2018 assessment due later this year.

The Challenge Panel received assurance from Bristol Water's Technical Auditor, that the performance information reported for 2017/18 is robust and can be relied upon by the business and its stakeholders.

A minor issue was identified with data due to a small number of calls not being logged but the Challenge Panel was assured that the impact of this on the reported number was immaterial. The company has responded to this finding by improving its reporting process.

The Challenge Panel noted that the company has made further progress in the year in improving the documentation of its reporting methodologies where Bristol Water's Technical Auditor considered this to be necessary. Further work is needed in improving the evidencing of information checking and version control of spreadsheets and other documents. The Challenge Panel notes this was an issue identified in 2016/17 and so it will monitor the company's response during the coming year.

Bristol Water informed the Challenge Panel that it has robustly looked at data that come from third parties, particularly from its contractors, and has improved the ownership of such data within the company and such data are subject to internal checks.

The Challenge Panel was pleased to see that the company assesses the quality of its performance commitment data and that it uses this information to benchmark and drive improvement where it is in the company's and customers' interests.



CHALLENGE PANEL FINDINGS CONTINUED

Bristol Water Performance

This section identifies the key points and challenges arising from Bristol Water's performance during 2017/18. The content is split into two parts; the first identifies the 12 Performance Commitments where Bristol Water has not achieved their target for the period; and the second identifies the nine Performance Commitments where the company has achieved the target and identifies where performance was maintained or improved from the year before.

In all cases Bristol Water's Technical Auditor has confirmed that both the company's reporting methodology and the resulting data for all the measures are sufficiently robust to enable the Challenge Panel to rely upon the published results.

In early 2018 Bristol Water discussed with the Challenge Panel why changes to how it reported some of its Performance Commitments were required. The Challenge Panel provided a letter of support that Bristol Water submitted to Ofwat along with its explanation of why the reporting changes were required. Ofwat has agreed these changes. A note has been added to each Performance Commitment reporting change in the sections below.

An overview of all Performance Commitments is included in Appendix 2 and the detailed review, including the definition of the Performance Commitment, is posted upon our web page.

TARGETS MISSED IN 2016/17

This section describes the Performance Commitment targets missed by Bristol Water during 2017/18.

A1: Unplanned customer minutes lost

Unit	mins/prop/yr
Target 2015/16	13.4
Actual 2015/16	15.5
Target 2016/17	13.1
Actual 2016/17	13.1
Target 2017/18	12.8
Actual 2017/18	73.7
Target 2018/19	12.5
Target 2019/20	12.2

The Challenge Panel notes that Bristol Water's performance against this measure deteriorated significantly from 2016/17. The reported number for 2017/18 was 73.7 minutes per property per year, well over the target of 12.8 minutes per property per year. Last year's reported performance was 13.1 minutes per property per year.

The associated financial penalty incurred for 2017/18 is £738,900. The total penalty accrued to date since 2015/16 is £1.478m. The forecast total penalty for 2015/16 to 2019/20 is £1.478m.

The Challenge Panel recognises this performance against this measure in 2017/18 was significantly impacted by large unplanned supply interruptions, particularly the burst main at Willsbridge in July 2017 when 35,000 properties lost supply. There were no such large interruptions during 2016/17.

The company briefed the Challenge Panel on the Willsbridge incident and

its operational and customer service response to it. The Challenge Panel was pleased to learn that, partly in response to this incident and others it has experienced, the company has begun to implement a new network strategy involving leadership changes, a new asset management function, a restructuring of its outsourced contractual arrangements and process and procedural improvements including a new work scheduling system. When the strategy is fully implemented, it, together with the newly-completed Southern Resilience Scheme and ongoing mains replacement and relining programmes, should mean the company is better placed to deal with such incidents in the future.

A2: Asset reliability – infrastructure (bursts/low pressure)

Unit	n/a
Target 2015/16	Stable
Actual 2015/16	Stable
Target 2016/17	Stable
Actual 2016/17	Stable
Target 2017/18	Stable
Actual 2017/18	Marginal
Target 2018/19	Stable
Target 2019/20	Stable

The reliability of the company's infrastructure assets in 2017/18 was assessed to be 'marginal', so missing the 'stable' target for the year.

There is no penalty accrued for 2017/18 because the performance was within the penalty deadband defined in Ofwat's Final Determination.

Whilst performance in 2017/18 against the low-pressure component of this commitment was below target as the number of properties at risk has

been reduced, the number of mains bursts in the year at 1,222 exceeded the target of 950. The company informed the Challenge Panel that the freeze-thaw event towards the end of 2017/18 took the number of bursts above the target and, without this event the target would have been achieved.

D1: Mean zonal compliance

Unit	(%)
Target 2015	99.96
Actual 2015	99.93
Target 2016	99.96
Actual 2016	99.97
Target 2017	100
Actual 2017	99.93
Target 2018	100
Target 2019	100

The Challenge Panel notes that Bristol Water's performance in 2017 against this measure was 99.93% against a target of 100%. Performance last year was 99.97% and has deteriorated to the level achieved in 2015.

The associated financial penalty incurred for 2017 is £284,000. The total penalty accrued to date since 2015 is £568,000. The forecast total penalty for 2015 to 2019 is £568,000.

The Challenge Panel was informed that performance fell as a result of problems on customers' pipework (over which Bristol Water has little control). The compliance of water from the company's assets remained high and similar to the previous year.

F1: Leakage

Unit	MI/day
Target 2015/16	48.0
Actual 2015/16	44.2
Target 2016/17	47
Actual 2016/17	46.4
Target 2017/18	45
Actual 2017/18	46.6
Target 2018/19	44
Target 2019/20	43

The reported leakage for 2017/18 was 46.6 MI/d, above the target of 45 MI/d. Leakage for 2016/17 was 46.4 MI/d.

The associated financial penalty incurred for 2017/18 (based on the original Final Determination target and methodology) is £1.082m. The total penalty accrued to date since 2015/16 is £1.082m. The forecast total penalty for 2015/16 to 2019/20 is £5.592m.

Last year Bristol Water informed the Challenge Panel that it was assigning more resources to reducing leakage, so the Challenge Panel is disappointed to see that leakage increased despite this. The company informed the Challenge Panel that in the summer of 2017 leakage levels were higher than desired and that it deployed extra resources in the autumn to tackle this. However, the freeze thaw event in March this year had a significant detrimental effect on leakage causing the target to be missed. Whilst the Challenge Panel accepts the cold conditions were exceptional for that time of year, it will monitor the company's leakage reduction activities in the coming year.

The company is forecasting to meet its leakage target for the rest of the current five-year period, based on its new reporting methodology. However, it has made a commitment that the incentives associated with its leakage performance will be calculated with reference to the original Final Determination leakage targets. This means it is anticipating a total penalty of £5.592m for 2015/16 to 2019/20 to be incurred.

G1: Meter penetration

Unit	%
Target 2015/16	50.4
Actual 2015/16	47.3
Target 2016/17	54.8
Actual 2016/17	49.3
Target 2017/18	58.8
Actual 2017/18	52.7
Target 2018/19	62.5
Target 2019/20	65.9

As reported in previous years Bristol Water made a slow start implementing its plan to install meters on change of occupancy. Despite increasing its meter penetration to 52.7% during the year the company fell short of its 2017/18 target of 58.8%.

The associated financial penalty incurred for 2017/18 is £152,000. The total penalty accrued to date since 2015/16 is £422,000. The forecast total penalty for 2015/16 to 2019/20 is £574,000.

During 2016/17 the company developed and commenced a revised metering plan and it invited comments from the Challenge Panel on this. Bristol Water's revised plan is designed to meet the original meter penetration target by 2019/20.

CHALLENGE PANEL FINDINGS CONTINUED

The Challenge Panel challenged the company to use all means available to promote the benefits of metering, to capture customers' experiences of the metering project and to ensure that any customer complaints received are analysed and the plan amended if necessary. The company has risen to these challenges, including setting up a new project delivery team and assigning additional resources and it is making progress against its revised plan. The Challenge Panel will continue to monitor progress during the coming year.

G2: Per capita consumption

Unit	litres/head/day
Target 2015/16	145.4
Actual 2015/16	141.1
Target 2016/17	144.5
Actual 2016/17	144.1
Target 2017/18	143.6
Actual 2017/18	144.5
Target 2018/19	142.8
Target 2019/20	142.0

The per capita consumption reported for 2017/18 was 144.5 litres per head per day. The target for the year was 143.6 litres per head per day so was missed. The reported consumption for the previous year was 144.1 litres per head per day. Bristol Water informed the Challenge Panel that the increase was probably partly due to it being behind on its meter installation programme and partly due to the dry weather experienced in 2017/18 which resulted in higher demand and usage such as garden watering. The incentive associated with this commitment is reputational.

H1: Total carbon emissions

Unit	kgCO ₂ e/person
Target 2015/16	32
Actual 2015/16	35
Target 2016/17	25
Actual 2016/17	32
Target 2017/18	23
Actual 2017/18	28
Target 2018/19	22
Target 2019/20	20

Bristol Water reduced its carbon emissions from 32 to 28 kgCO₂e per person from last year but missed the 2017/18 target of 23 kgCO₂e per person. It has missed all its targets since 2015/16. As reported in previous years, the company has informed the Challenge Panel that the use of some standard industry definitions when the targets were set are proving to be too aggressive and cannot be met in a cost-effective manner. The company has informed the Challenge Panel of the ways in which it is implementing energy savings. However, it is unlikely to meet its 2019/20 emissions target of 20 kgCO₂e per person. The Challenge Panel is disappointed that this may be the outcome but accepts the reasons for this. The incentive associated with this commitment is reputational.

H4: Waste disposal compliance

Unit	%
Target 2015/16	100
Actual 2015/16	96
Target 2016/17	100
Actual 2016/17	96
Target 2017/18	100
Actual 2017/18	98
Target 2018/19	100
Target 2019/20	100

Bristol Water achieved 98.1% compliance against the 2017/18 target of 100%. This represented an improvement from the year before. As reported last year most issues affecting performance are related to difficulties in obtaining samples. The issues were resolved at water treatment works at Purton and Littleton but remain at Barrow where the company is struggling to find a permanent solution. This coupled with a new discharge consent at Blagdon will mean the target is likely to be missed for the remainder of the period. The incentive associated with this commitment is reputational.

J1: Service Incentive Mechanism (SIM)

Unit	ranking
Target 2015/16	Top 5 (85.00)
Actual 2015/16	Top 5 (85.10)
Target 2016/17	Top 5 (85.00)
Actual 2016/17	Top 5 (85.91)
Target 2017/18	Top 5 (86.00)
Actual 2017/18	Not Top 5 (83.38)
Target 2018/19	Top 5 (SIM TBC)
Target 2019/20	Top 5 (SIM TBC)

The company agreed with Ofwat a change to reporting this metric, therefore the targets are presented as the previous year's upper quartile SIM, meaning the 2018/19 and 2019/20 upper quartile targets cannot yet be stated.

The Challenge Panel noted that the company's SIM performance fell from the previous year's SIM score of 86. Bristol Water has to wait for other companies' data to be published to confirm whether its SIM performance in 2017/8 will be in the industry top five.

There is no penalty accrued for 2017/18 because the performance was within the penalty deadband defined in Ofwat's Final Determination.

The company told the Challenge Panel that its SIM performance had been affected by the high number of significant operational incidents it suffered during 2017/18. These included supply interruptions at Willsbridge and Sea Mills, the precautionary boil water notice at Clevedon and the freeze thaw event. The Challenge Panel was encouraged to learn that customers were generally satisfied with the company's responses to these incidents but expressed concern over the distribution of bottled water to those in need during supply interruptions. The company responded positively to this feedback and its response to the Clevedon water quality issue was more satisfactory in this respect as a result.

J2: General satisfaction from surveys

Unit	%
Target 2015/16	93
Actual 2015/16	83
Target 2016/17	93
Actual 2016/17	86
Target 2017/18	93
Actual 2017/18	87
Target 2018/19	93
Target 2019/20	93

Bristol Water achieved a satisfaction score of 87% in 2017/18, a 1% increase on the previous year. However, the 87% satisfaction achieved fell short of the 2017/18 target of 93%. The company considers customers' satisfaction was adversely affected by the high number of significant operational incidents it suffered during 2017/18. These included supply interruptions at Willsbridge and Sea Mills, the precautionary boil water notice at Clevedon and the freeze thaw event. The Challenge Panel was encouraged to learn that the company is working hard to improve its customer service through initiatives including the improvement of its digital offering, bad debt reduction and assisting customers with water efficiency. The Challenge Panel will monitor progress during the coming year.

J3: Value for money

Unit	%
Target 2015/16	71
Actual 2015/16	70
Target 2016/17	71
Actual 2016/17	72
Target 2017/18	71
Actual 2017/18	69
Target 2018/19	72
Target 2019/20	72

For 2017/18 Bristol Water reported a 69% performance for this measure against a target of 71%. Performance slipped from 72% the year before.

The company told the Challenge Panel that it believes its score has dropped because of the operational incidents it suffered during 2017/8 particularly the precautionary boil water notice in Clevedon. The Challenge Panel also considers the

increased public debate around re-nationalisation of the water industry may also have had an impact.

K1: Ease of contact from surveys

Unit	%
Target 2015/16	96.3
Actual 2015/16	95.0
Target 2016/17	94.4
Actual 2016/17	94.4
Target 2017/18	96.5
Actual 2017/18	93.1
Target 2018/19	>96.5
Target 2019/20	>96.5

For 2017/18 Bristol Water achieved a 93.1% performance for this measure against a target of 96.5%. Performance in 2016/17 was 94.4% so has reduced slightly.

The Challenge Panel notes that Bristol Water is introducing IT improvements designed to improve customer service by making it easier to respond to enquiries. It also welcomed the company's efforts to understand and reduce customers' 'don't know' responses to the survey questions. The Challenge Panel will monitor performance against this measure during the coming year.

CHALLENGE PANEL FINDINGS CONTINUED

TARGETS MET OR EXCEEDED IN 2017/18

This section describes the Performance Commitment targets achieved by Bristol Water during 2017/18 and where performance was the same or improved from the year before.

A3: Asset reliability – non-infrastructure

Unit	n/a
Target 2015/16	Stable
Actual 2015/16	Stable
Target 2016/17	Stable
Actual 2016/17	Stable
Target 2017/18	Stable
Actual 2017/18	Stable
Target 2018/19	Stable
Target 2019/20	Stable

The reliability of the company's non-infrastructure assets in 2017/18 was assessed to be 'stable' in line with the target for the year.

B1: Population in centres >25,000 at risk of asset failure

Unit	pop at risk
Target 2015/16	288,589
Actual 2015/16	288,589
Target 2016/17	288,589
Actual 2016/17	288,589
Target 2017/18	9,063
Actual 2017/18	9,063
Target 2018/19	9,063
Target 2019/20	9,063

The company's performance in 2017/18 was in line with the target because the Southern Resilience Scheme was completed during the year as planned.

C1: Security of Supply Index

Unit	%
Target 2015/16	100
Actual 2015/16	100
Target 2016/17	100
Actual 2016/17	100
Target 2017/18	100
Actual 2017/18	100
Target 2018/19	100
Target 2019/20	100

The company's performance in 2017/18 was 100% in line with the target.

C2: Hosepipe ban frequency

Unit	days
Target 2015/16	10.2
Actual 2015/16	1.5
Target 2016/17	10.2
Actual 2016/17	3.1
Target 2017/18	10.2
Actual 2017/18	3.1
Target 2018/19	10.2
Target 2019/20	10.2

The reported return period for 2017/18 was 3.1 days per year, the same as in 2016/17. The target for 2017/18 was 10.2 days per year so the actual performance was well within this.

E1: Negative water contacts

Unit	contacts/year
Target 2015	2,422
Actual 2015	2,329
Target 2016	2,409
Actual 2016	2,162
Target 2017	2,322
Actual 2017	1,711
Target 2018	2,275
Target 2019	2,221

The Challenge Panel is pleased to note that Bristol Water's performance against this measure has improved over 2016. 1,711 negative water contacts were recorded in 2017, 451 (21%) fewer than the previous year. The target for 2017 was 2,322 negative water contacts.

H2: Raw water quality of sources

Unit	% of AMP5 baseline aggregate of algal bloom frequency
Target 2015/16	>+10% (Deteriorating)
Actual 2015/16	+20% (Deteriorating)
Target 2016/17	>+10% (Deteriorating)
Actual 2016/17	+11% (Deteriorating)
Target 2017/18	+/-<10% (Marginal)
Actual 2017/18	-1% (Marginal)
Target 2018/19	+/-<10% (Marginal)
Target 2019/20	+/-<10% for >2 years (Stable)

The company agreed with Ofwat a change to reporting this metric, therefore the targets are presented as a % change of the AMP5 baseline aggregate (8,059) of algal bloom frequency

The quality of the company's raw water sources in 2017/18 was assessed to be 'Marginal' in line with expectation. This represents an improvement on the positions reported in 2015/16 and 2016/17.

H3: Biodiversity Index

Unit	Index
Target 2015/16	17,649 (Improving)
Actual 2015/16	17,649 (Improving)
Target 2016/17	17,650 (Improving)
Actual 2016/17	17,650 (Improving)
Target 2017/18	17,651 (Improving)
Actual 2017/18	17,657 (Improving)
Target 2018/19	17,652 (Improving)
Target 2019/20	17,653 (Improving)

The company agreed with Ofwat a change to reporting this metric, therefore the targets are presented as a numerical BI index score

Bristol Water achieved an 'improving' Biodiversity Index in 2017/18, in line with its target. The Challenge Panel notes that the Biodiversity Index score will reduce due to natural degradation in the environment and that the company has to undertake environmental improvement work to counter this.

I1: Percentage of customers in water poverty

Unit	%
Target 2015/16	2.0
Actual 2015/16	0.4
Target 2016/17	2.0
Actual 2016/17	0.9
Target 2017/18	1.9
Actual 2017/18	0.0
Target 2018/19	1.9
Target 2019/20	1.8

The reported percentage of customers in water poverty in 2017/18 was 0.0%, a decrease from the figure of 0.9% reported last year. The target percentage for 2017/18 was 1.9% so the Challenge Panel was pleased to see performance was well within this and continues the improvement from last year. The improvement has been achieved through the Assist social tariff.

L1: Negative billing contacts

Unit	contacts/year
Target 2015/16	2,480
Actual 2015/16	2,301
Target 2016/17	2,395
Actual 2016/17	3,096
Target 2017/18	2,315
Actual 2017/18	2,300
Target 2018/19	2,240
Target 2019/20	2,170

Bristol Water reported 2,300 negative billing contacts in 2017/18. This was significantly fewer than in 2016/17 (3,096) and just below the target of 2,315 for 2017/18.

The Challenge Panel was pleased to learn that performance has improved and that the increased focus the company is giving to customer service and the initiatives such as proactive text messaging it has introduced are proving to be effective. It will continue to monitor the company's performance against this measure in the coming year.

CHALLENGE PANEL FINDINGS CONTINUED

Customer Engagement

ENGAGEMENT FRAMEWORK

Agreeing the Customer Engagement Framework, as reported in our 2016/17 Annual Report, has provided the Challenge Panel and Bristol Water with a shared understanding of the engagement task. It has also provided the framework for monitoring the progress of engagement via the Quarterly Progress Reports which were discussed at the quarterly Customer Engagement Sub Group, this is detailed in the Meetings Section above. This enabled the Challenge Panel to challenge and suggest changes to the detail of the customer engagement as it progressed.

The Customer Engagement Framework made use of a variety of research tools:

Deliberative workshops: a random group of around 30 customers spend time learning about a particular element of the Bristol Water business and discussing it together. This approach is used to understand customer views on complex issues like how Bristol Water meet water supply needs in the long term.

Focus groups and interviews: smaller groups of customers or individuals

to understand their views on a very specific topic, or to hear from a particular group of customers like those who are struggling with their bills.

Surveys: a wide range of surveys to ask large numbers of customers what they think, for example the customer panel where up to 1,000 customers let Bristol Water know their views.

Economic valuation tools: Bristol Water used six diverse types of valuation tools to determine customer attitudes to the value

placed on Bristol Water's service which were used in setting Bristol Water's bill options. Bristol Water have been innovative in using new techniques like revealed preference surveys that investigate the actual costs customers face when supply is interrupted and integrated valuation studies into the deliberative workshops.

Customer forum: a forum of about 40 customers that meets four a times a year to feed in to Bristol Water's business planning.



Customer Preferences

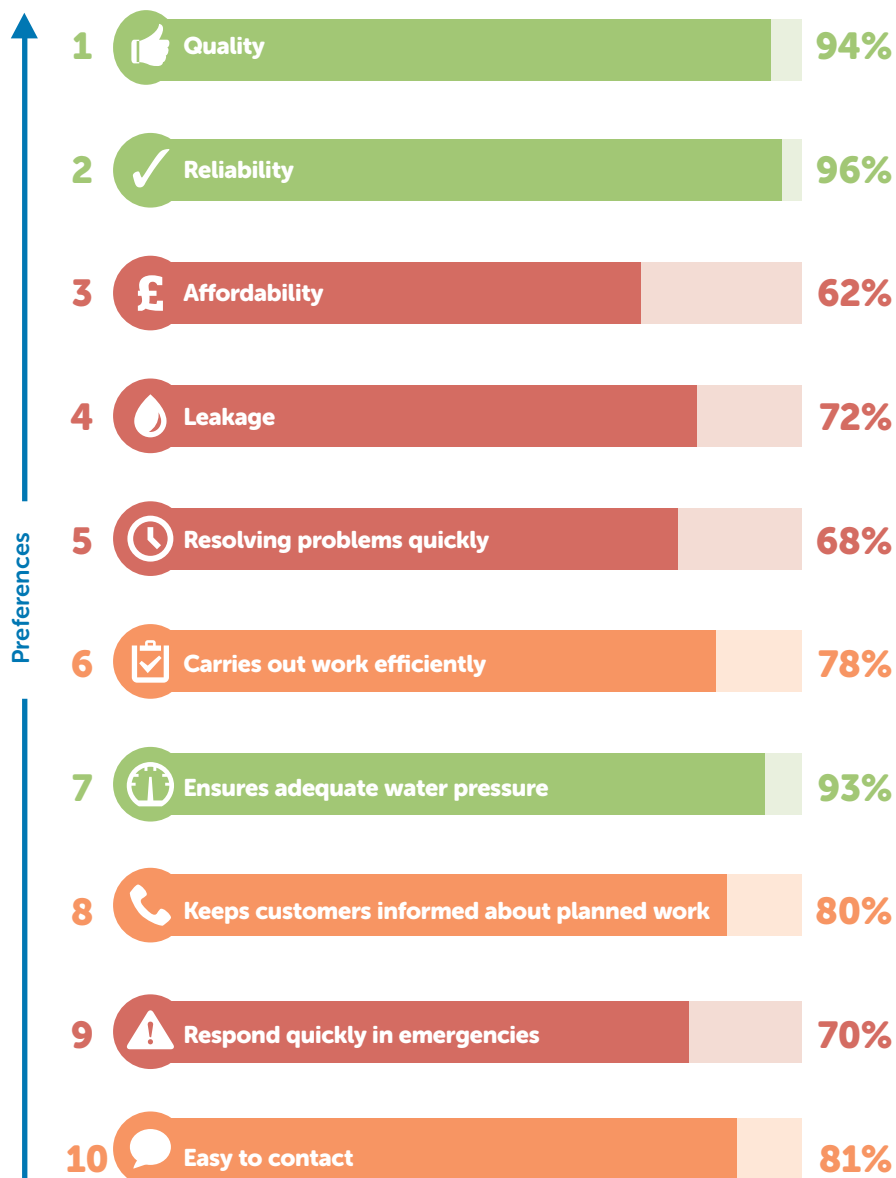
Bristol Water have a range of research on customer priorities available both from the last price review, and from ongoing customer research. Bristol Water refreshed its understanding of customer priorities by conducting three research events with different customer groups, designed to better understand some of the reasons behind the priorities customers choose and to understand the views of different customer groups. This has been supplemented by the annual survey.

The research showed that the top priorities of Bristol Water's customers have remained largely unchanged over the years, with reliability, water quality, and affordability consistently prominent across most of the research. Most customers think Bristol Water are doing well across the range of priorities, but some areas still have room for improvement.

■ Seen to be area requiring significant improvement

■ Seen to be area requiring some improvement

■ Seen to be area where we are performing well



CHALLENGE PANEL FINDINGS CONTINUED

Who are the customers

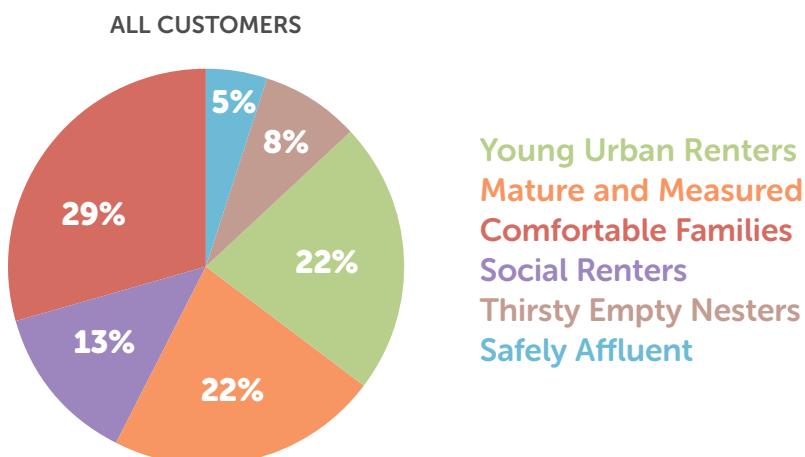
As part of the Customer Engagement Framework, Bristol Water conducted a segmentation exercise, using their customer data to better understand who their customers are and their individual needs. This took some time to complete and involved the Challenge Panel at various stages as Bristol Water wished to move away from the conventional methods and provide something that more matched their customers.

Customer segmentation runs right through the whole of the research programme as it is the mechanism by which a single piece of research can be matched to the Bristol Water customer base and thus become relevant to ongoing work.

Understanding our customers

A list of some 60 possible variables was presented to the Challenge Panel who queried several apparently missing variables stretching from race through ethnicity and religion to health issues and pension credit.

The results were used to align the results of research to the Bristol Water customer base, the intention being that these customer personas provide a framework within which all future research can explore the variation in views among different customers.



Safely Affluent 5%

The average age of this group of customers is 58. They have an average income of £71,000 and very few are in debt or struggling. 98% own their own home and most live in a detached house. Nearly half have children at home. Only 36% use a water meter but most are interested in saving water.



Thirsty Empty Nesters 8%

The average age of this group of customers is 63. They have an average income of £36,000 and over half are struggling or in debt. The majority live in their own home – mostly in semi-detached or terraced houses. This group pays the most for their water – but most do not have children at home and live by themselves or with one other person. Only 6% have a water meter.



Mature & Measured 23%

This group of customers have an average age of 73 and an average income of £39,000. Only 33% are employed, but only a few are running into debt. Most of these customers own their own homes and live with only one other person. All are interested in making efforts to cut down their water usage and most are on a water meter.



CHALLENGE PANEL

FINDINGS CONTINUED

Who are the customers

Young Urban Renters 22%

This group of customers have an average age of 36, and an average income of £38,000. Most of them are employed, and a small majority rent the property they live in. Most are only just managing to make ends meet and could be running into debt. A small majority have a water meter, this group demonstrates the least interest in cutting down their water usage.



Social Renters 13%

This group of customers have an average age of 59 and an average income of £19,000. Most are in debt or struggling, and only 33% are employed. Most of this group are in social housing, and the majority live alone or with one other person.



Comfortable Families 29%

The average age of this group of customers is 46. They have an average income of £41,000 and only half are in debt or struggling. A majority own their own homes and are employed. Most have children at home – with 3 or 4 people in the property. Only 40% use water meters.



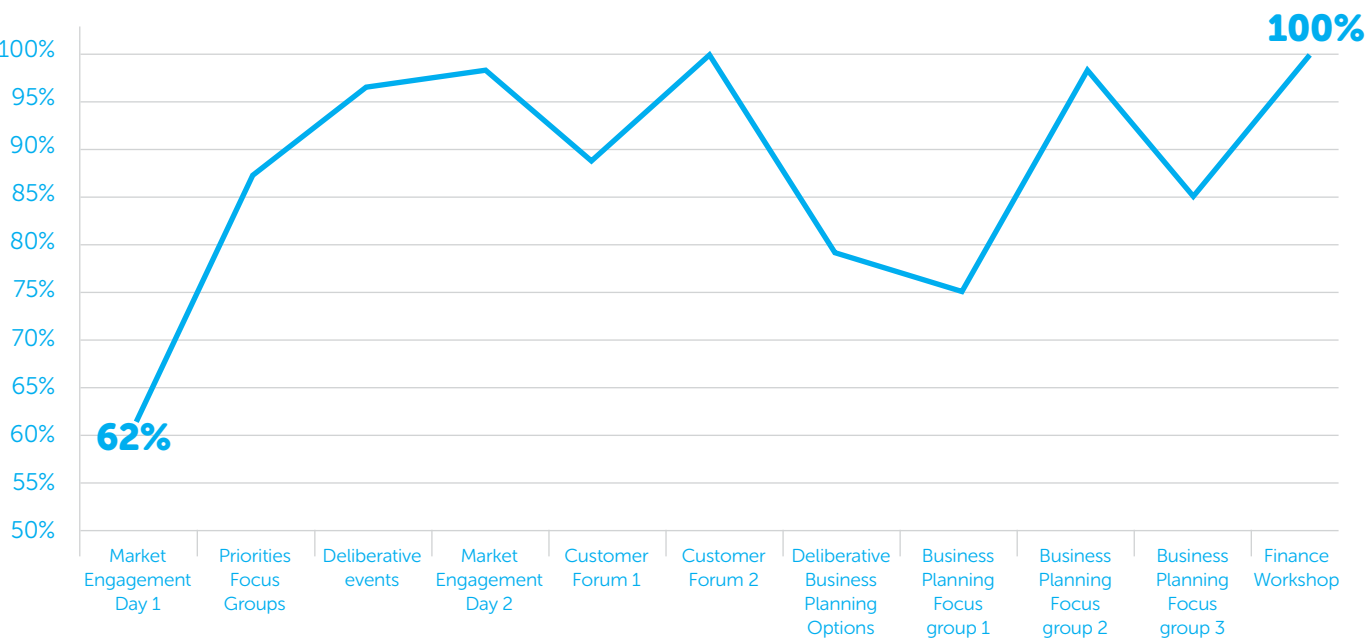
Research Topics

When implementing the Framework, the Challenge Panel needed to ensure that when customers discussed their priorities, preferences and responsibilities regarding the level of service they

wanted from Bristol Water that; they knew enough about the water they drink, clean with and use every day; they could ask about the things they lacked knowledge on; they could identify areas where

they could take on responsibilities, they were charged more fairly for the amount of water they use and much more besides.

“I understand how the output from the event will be used by Bristol Water”



After every workshop, focus group or interview, Bristol Water carried out a set of evaluations to gauge customer views. Bristol Water needed to ensure the customer insights were fed into

the business plan, however, the lowest evaluation score was for 'knowing how the output from the event will be used by Bristol Water'. An evaluation approach that tracks the influence of our customer

research more systematically was implemented as well as more information being provided to customers; resulting in a very positive improvement in evaluation scores as shown on the chart.

CHALLENGE PANEL FINDINGS CONTINUED

During the year the Challenge Panel became concerned about the way environmental protection and enhancement were being treated in the research.

After some work with the Challenge Panel Bristol Water developed their understanding of and research into environmental issues resulting in Bristol Water treating these attributes with the same rigour as other attributes of their customer service.

The Customer Engagement Sub Group quarterly review meeting made clear that Bristol Water were supporting the Periodic Review 2019 internal working groups to ensure that decision makers were making the most of the research outputs. This resulted in the development of an evaluation before and after the use of the research. As well as embedding customer research into the organisation it produced a shared understanding that engaging customers on certain topics is difficult and takes time and that customer engagement is needed earlier in the process. In this way the use of customer views and priorities was becoming enshrined throughout the company right from the Periodic Review 2019 Executive meetings downwards.

The Challenge Panel welcomed the addition of research on financing of the company into the Framework programme. As well as being enjoyable for the attendees it had provided an interesting insight into customer's views on company debt and profit. The Challenge Panel looks forward to receiving and discussing the final report of the event and how it is shaping Bristol Water's business plan.

One of the highlights of the Customer Engagement Framework was in receiving and challenging the innovation that Bristol Water had built into the programme. One of the first major innovations was the use of 'Max Diff' methodology within

the Willingness to Pay work; this was rightly praised by the reviewer during the independent Peer Review. The 'Max-Diff' exercise required respondents to choose which of the service issues shown to them would have the most impact on them and which would have the least impact. From this a quantitative index of preference/importance is obtained, from which the value of each service is estimated. These values are averaged over the whole survey base.

The Challenge Panel found the explanation of the Triangulation process to be very informative and could immediately see the advantages of the method in bringing together diverse research results to provide a range of attribute values for Bristol Water to use in its cost benefit analysis and the allocation of future incentive targets and rates.

There were two aspects of the research programme that need following up in the next period. The first was the identification of some methodological limitations in the Willingness to Pay stage 1 research which was carried out jointly with Wessex Water. It currently appears that the limitation does not apply to the Bristol Water results, but this needs clarification. The second was the disappointingly low confidence levels attributed to the Triangulation outputs; further research is programmed to clarify customer values.

The Challenge Panel would like to thank Bristol Water for the time they took to ensure we had the opportunity to discuss and challenge the Customer Engagement programme and on the way Bristol Water took into consideration the Challenge Panels' comments both before and during the research.

FOCUS FOR 2018/19

2018 to 2019 will be a critical period for the work of the Bristol Water Challenge Panel. In September 2018, Bristol Water will submit its draft business plan for the period 2020 to 2025 to the economic regulator Ofwat.



The Bristol Water draft business plan is a critical report that will influence how much scrutiny Ofwat gives to the company's business plan and implementation going forward. As a Challenge Panel, our ambition is to help Bristol Water to be among the best companies in the water sector and beyond by listening and responding to the priorities and preferences of its customers in an environment where climate change, environmental degradation, using natural resources wisely and austerity form the primary context for business planning. 2018 to 2019 will be a critical period for the work of the Bristol Water Challenge Panel. In September 2018, Bristol Water will submit its draft business plan for the period 2020 to 2025 to the economic regulator Ofwat. The Challenge Panel will also submit to Ofwat its analysis of how the Bristol Water draft business plan is crafted from input from its customers. Currently Bristol Water is in a category that receives the highest scrutiny by Ofwat as a result of weaknesses in its current business plan.

In the run up to the preparation of the Challenge Panel report, the Challenge Panel will need to assure Ofwat of the quality of Bristol Water's customer engagement strategy and its implementation. Of utmost importance will be how well the company understands and listens to the priorities and preferences of its customers - from issues ranging from the quality of the water service provided to how much the customer may expect to pay on their water bill. Ofwat has stipulated that the Challenge Panel response must assure it on a prescribed number

of matters that are common across all water companies. How thoroughly Bristol Water does this will be assessed especially for issues regarding financial, operational and distribution resilience, as well as how Bristol Water wants to use innovative techniques to reduce costs and improve service. Regard must also be given to the state of the environment where sources of water arise and how Bristol Water will look after its vulnerable customers. A list of some of the key lines of response required by Ofwat can be found in appendix 3.

Once Ofwat has assessed Bristol Water's draft business plan, a dialogue between the regulator, the Challenge Panel and the company will take place to agree the final business plan. It is likely that additional customer research on the acceptability of the business plan and the cost of water bills will be required in the year ahead.

The Challenge Panel will continue its scrutiny of Bristol Water's Performance during the year, with special attention being given to the following areas, as mentioned in the main text:

- **F1:Leakage**
Monitor leakage reduction activities
- **G1:Meter Penetration**
Monitor progress of the project delivery team
- **J2:General satisfaction from surveys**
Monitor improvement in digital offering and bad debt reduction
- **K1:Ease of contact from surveys**
Monitor IT improvements and understand 'don't know' responses



CONCLUSIONS

The work of the Bristol Water Challenge Panel during the year 2017 to 2018 has been focused on two complementary areas of enquiry; the first being the monitoring of the performance of Bristol Water during the year, and the second being the implementation of the first phase of the customer engagement strategy.

The findings from this strategy feed directly into the development of the draft business plan for Bristol Water for the period 2020 to 2025.

Regarding the performance of Bristol Water during the year, this document sets out a full analysis of the performance of Bristol Water against promises made in its last business planning period, ie 2015 to 2020. Failure to achieve the targets set on some indicators can be balanced against the significant investment made by Bristol Water in its Southern Resilience scheme; a major water distribution scheme to provide water and reduce vulnerability in communities in the south west of our region. For example, a substantial mains burst and the effects of unusually cold spells during the winter account for Bristol Water's inability to meet a clutch of interrelated targets. However, the quality of communication to customers regarding these events demonstrates how proactive the company has become in providing up to date information to its customers, particularly those in vulnerable situations. Another area where performance has been less than planned is that of water meter installation. A public-facing campaign to encourage people to request a water meter is having some effect and will ensure that people pay for the amount of water they use.

In connection with the implementation

of the customer engagement strategy, Bristol Water has used a range of research methods to hear what customers value and how they might make trade-offs between choices available regarding the supply of water to their homes and businesses. The Challenge Panel has interrogated Bristol Water at each stage of the implementation process to ensure that we understand how the research data is being collected and interpreted as well as how the results will be used in the development of Bristol Water's draft business plan. For example, the Challenge Panel has been vigilant to ensure that residents of all backgrounds, circumstances and locations have had an opportunity to comment on specific pieces of research. The Challenge Panel has observed many of the research sessions and challenged how Bristol Water analysed the complex information received. The Challenge Panel also has scrutinised how the customers' responses were interpreted for use in the draft business plan. As such the role of the Challenge Panel is critical as Bristol Water will use the results of the customer engagement programme to influence how much customers pay for the water bills from 2020 to 2025. Additionally, the Challenge Panel will be able to carry out its main function of assuring the regulator Ofwat that the interests, preferences and priorities of its customers are uppermost in the

development of its next business plan. In summary, the influence of the Challenge Panel can be observed through the broadening content and increasing improvement in the quality of communications that Bristol Water has with its customers. The Challenge Panel has shaped Bristol Water's approach in how it

- provides day-to-day customer service,
- involves customers of all types and in all locations in discussing their priorities and references,
- consults on policies such as its drought plan and water resources management, and
- informs the public regarding incidents that might affect the water supply and more.

During the year, the visibility of Bristol Water, and the breadth of its customer communications, has been upgraded in terms of the quality of content and responsiveness across a range of print, broadcast and social media. Approximately one in four challenges made by the Challenge Panel has resulted in a change in practice within Bristol Water and has brought the interests of its customers and those of the company closer together.

Peaches Golding OBE
Independent Chairman,
Bristol Water Challenge Panel
August 2018

APPENDIX 1: CHALLENGE PANEL MEMBERS AS AT 31 MARCH 2018

Name	Organisation	Operating Environment
Peaches Golding	Chair	Marketing, Influencing
Tony Denham	Deputy Chair	Water Regulation, Scrutiny
Jeremy Hawkins	Report Writer	Water Regulation, Assurance
Jeremy Bailey	Environment Agency	Environmental Regulation
Mark Taylor	Natural England	Environmental Regulation
Michael Barnes	Consumer Council for Water	Water Customers, Evaluating
Mike Bell	Consumer Council for Water	Water Customers, Challenge
Robert Cleland	North Somerset Council	Customer Representation
Chad Staddon	University of the West of England	Water Regulation, Climate Change
Danielle Wain	Bath University	Young Customers, Data analysis
Alison Sleightholm	Western Power	Regulated Utility, Customers
Luke Hassell	The Story Group	Farming, Climate Change
Alex Hastings	Independent	Urban communities, Diversity
David Wilson	Duchy of Cornwall	Farming, Rural Communities
Tabinda Rashid-Fadel	University of the West of England	Public Health, Equal Opportunities and Diversity
Terry Napper	Mendip District Council	Customer Representation
Daniel Woodhead	StepChange	Voluntary Sector

APPENDIX 2: BRISTOL WATER PERFORMANCE RESULTS

Outcomes and Performance Commitments	Unit	Target 15/16	Actual 15/16	Target 16/17	Actual 16/17	Target 17/18	Actual 17/18	Target 18/19	Target 19/20
Reliable supply									
A1: Unplanned customer minutes lost	mins/prop/yr	13.4	15.5	13.1	13.1	12.8	73.7	12.5	12.2
A2: Asset reliability – infrastructure	n/a	Stable	Stable	Stable	Stable	Stable	Marginal	Stable	Stable
A3: Asset reliability – non-infrastructure	n/a	Stable	Stable	Stable	Stable	Stable	Stable	Stable	Stable
Resilient supply									
B1: Population in centres > 25,000 at risk of asset failure	pop at risk	288,589	288,589	288,589	288,589	9,063	9,063	9,063	9,063
Sufficient supply									
C1: Security of Supply Index	%	100	100	100	100	100	100	100	100
C2: Hosepipe ban frequency	days	10.2	1.5	10.2	3.1	10.2	3.1	10.2	10.2
Safe drinking water									
D1: Mean zonal compliance	%	99.96	99.93	99.96	99.97	100	99.93	100	100
Water is good to drink									
E1: Negative water contacts	contacts/year	2,422	2,329	2,409	2,162	2,322	1,711	2,275	2,221
Efficient use of resources by company									
F1: Leakage	MI/day	48.0	44.2	47.0	46.4	45.0	46.6	44.0	43.0
Efficient use of resources by customers									
G1: Meter penetration	%	50.4	47.3	54.8	49.3	58.8	52.7	62.5	65.9
G2: Per capita consumption	litres/head/day	145.4	141.1	144.5	144.1	143.6	144.5	142.8	142.0
Sustainable environmental impact									
H1: Total carbon emissions	kgCO ₂ e/person	32	35	25	32	23	28	22	20
H2: Raw water quality of sources	% of AMP5 baseline aggregate of algal bloom frequency	>+10% Deteriorating	+20% Deteriorating	>+10% Deteriorating	+11% Deteriorating	+/-<10% Marginal	-1% Marginal	+/-<10% Marginal	+/-<10% for >2 years Stable
H3: Biodiversity Index	Index	17,649 Improving	17,649 Improving	17,650 Improving	17,650 Improving	17,651 Improving	17,657 Improving	17,652 Improving	17,653 Improving
H4: Water disposal compliance	%	100	96	100	96	100	98	100	100
Affordable bills									
I1: Percentage of customers in water poverty	%	2.0	0.4	2.0	0.9	1.9	0.0	1.9	1.8
Satisfied customers									
J1: Service Incentive Mechanism (SIM)	ranking	Top 5 (85.10)	Top 5 (85.10)	Top 5 (85.00)	Top 5 (85.91)	Top 5 (86.00)	Not Top 5 (83.38)	Top 5 (SIM TBC)	Top 5 (SIM TBC)
J2: General satisfaction surveys	%	93	83	93	86	93	87	93	93
J3: Value for money	%	71	70*	71	72	71	69	72	72
Easy to contact									
K1: Ease of contact from surveys	%	96.3	95.0*	94.4*	94.4*	96.5	93.1	> 96.5	> 96.5
Bills that avoid confusion for customers									
L1: Negative billing contacts	contacts/year	2,480	2,301	2,395	3,096	2,315	2,300	2,240	2,170

* re-stated performance following amendments to reporting methodology

APPENDIX 3: KEY LINES OF RESPONSE REQUIRED BY OFWAT

The key items arise from the Aide Memoire for Customer Challenge Groups (CCGs) provided by Ofwat in March 2018, a copy of which is provided on our webpage.

General requirements on CCGs comes from the Customer Engagement Policy Statement and Expectations for Periodic Review 2019 issued by Ofwat in May 2017.

Topic	Questions	Reference
Role of CCGs at PR19	2	Customer Engagement Policy Statement
Evidence provided on how the CCG has carried out its role	7	Section 3.2.1 of the Customer Engagement Policy Statement
Strength and transparency of governance arrangements	6	Customer Engagement Policy Statement

The majority of questions requiring a CCG response come from the Ofwat Final Methodology for the 2019 Price Review issued in December 2017 as follows:

Topic	Questions	Reference
CCG role	1	Executive summary and chapters 2, 13 and 14.
Customer engagement	1	Chapter 2
Engagement with business retailers	1	Chapter 2
Affordability	1	Chapter 3 and Appendix 1
Vulnerability	2	Chapter 3 and Appendix 1
Performance Commitments	10	Chapter 4 and Appendix 2
Outcome Delivery Incentives	7	Chapter 4 and Appendix 2
Securing confidence and assurance	2	Chapter 13
Resilience planning principles	2	Appendix 4
Securing cost efficiency – need for investment	1	Appendix 11
Financeability	1	Chapter 11
Bill profiles	1	Chapter 11
Accounting for past delivery	1	Chapter 12
The initial assessment of business plans (IAP)	4	Chapter 14 and Appendix 13

