Bristol Water’s Mid-Year Performance Report 2017/18

An update on Bristol Water’s performance
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**Introduction**

**About Bristol Water**

Bristol Water is a water supply company, responsible for the provision of water to 1.2 million customers in the city of Bristol and surrounding area.

We are one of 16 companies in England and Wales who distribute water and Bristol Water is one of six that focuses exclusively on water, not waste water. In our supply area, waste water services are provided by Wessex Water.

Bristol Water has set up as private water company in 1846 and has continued in this role ever since. Parts of our network still date from these early days. Our original aim then, as it is today, was to supply good clean drinking water with a high quality service and that is value for money. We provide excellent quality of water, and some of the lowest levels of leakage in the country.

Our vision is to meet our customers' expectations by providing an outstanding water service in a sustainable and affordable way.

In 2014 we published a business plan setting out our priorities for 2015-20. This included a number of key aims and the outcomes that we want to deliver for our customers and stakeholders. Our aims show how seriously we take protecting the quality of the environment that our water supplies rely on, as well as helping customers to contribute to this through water efficiency.

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**About this document**
It is important that customers can find out how we are performing against our targets. We are committed to providing this information on our website and have embraced a more open
and accessible approach to customer communications over the last few years. We regularly publish information on our performance to demonstrate to customers, stakeholders and our regulators that we are delivering the services expected of us. This mid-year report is another example of our commitment to being open and transparent with our customers and stakeholders. It will help us deliver our aims and outcomes. Some of these performance commitments are common to all other water supply companies (in England and Wales) and some are Bespoke to Bristol Water. Where comparisons exist, provided through the Discover Water¹ website and in company Annual Performance Reports, we have framed our performance in the context of the rest of the industry. Transparency is important to us, and together with Bristol Water’s Challenge Panel, our customer challenge group², we constantly try to improve our approach to the presentation of our performance. For example, we think that indicating our relative position to other companies using colour-coding helps to provide customers and stakeholders with more context than just whether we are meeting our targets.

The Bristol Water Challenge Panel is an independent group of interested and expert stakeholders whose role is to ensure that customer voice remains at the heart of Bristol Water’s decision-making. It has an Independent Chair – Peaches Golding OBE – and the panel has regular access to our Board. A key part of their role is to monitor the delivery of our commitments to customers. They produce an annual report on our performance that is available on our website, which goes through each of our performance commitments from the customer’s perspective. For this report, as well as challenging us on our performance so far this year, the Panel provided us with ideas and comments as we developed our novel approach to presenting our performance. We also took on board their challenges as to whether we had provided a clear and well-justified explanation of our performance as possible.

Regulatory requirements

In our 2014 Business Plan, we stated we would publish an update on outcome performance every six months (mid-year review) and present this to the Bristol Water Challenge Panel. This submission was volunteered by Bristol Water and we have had our performance information assured with our third party technical reporter, Atkins.

Our reporting is based on year-to-date performance to the end of September 2017. We have also forecast our performance against 2017/18 targets for the full year. In addition, we have provided a short explanation for our performance against each performance commitment.

¹ An online dashboard designed to provide clear and trustworthy information for customers about water companies in England and Wales
² An independent group of representatives who ensure Bristol Water continues to be held to account for delivering our performance commitments and meeting the promises we make to our customers. The group is comprised of representatives from the Consumer Council for Water, the Environment Agency, Natural England, Citizens Advice Bureau, local councillors, local universities and independent customer representatives.
The Willsbridge burst

Some of our performance commitments are behind our targets in the first half of this year, and in the case of the “unplanned customer minutes lost” measure of supply interruptions the target for the full year has already been exceeded. This is mainly caused by two large bursts experienced in the first half of this year. The first at Sea Mills in May affected 2,100 homes and businesses. The second at Willsbridge in July affected 32,000 homes and businesses. These were significant events, and a case study that summarises the challenges we faced at Willsbridge can be found on pages 20 and 21. The overall number of mains bursts we have had so far this year is in line with our target, and as we explain in the case study the condition of the pipe that burst at Willsbridge was good, with a number of other factors that causing the burst.

Despite our best efforts to restore water to those affected as quickly as possible, these events resulted in a significant increase in the number of contacts, and understandably complaints that we received from customers. We explain for each performance target the action we are taking to meet the expectations of our customers.
**Technical Assurance Statement**

We (Atkins) have been appointed by Bristol Water to carry out independent third party technical assurance of the various submissions and publications prepared by the Company, other than where covered by the financial auditors of the statutory and regulatory accounts. The reporting of the mid-year Performance Commitment (PC) position was volunteered by Bristol Water and included in Ofwat's Final Determination in 2014. This statement refers to the assurance of the mid-year publication for 2017-18. Some of the measures do not lend themselves to be reported at mid-year and the PCs are only formally reported at financial year-end

The reporting by Bristol Water of performance against its AMP6 Performance Commitments has been part of a process of continuing improvement, which has seen substantial progress in robustness and transparency since the first publication in 2015. Our assurance audits assess both the methodologies applied and the data that is produced. Where required, we reviewed the way in which the Company was forecasting the year end position, considering the appropriateness of the methodologies used and sense checking the assumptions made. We considered historical performance and trends, the mid-year position and the potential for changed circumstances before year-end. We produced a technical report summarising the findings from our more detailed audit reports.

Details of the PCs and the reported figures are published by Bristol Water. We have made observations on the supporting information and methodologies applied by Bristol Water that do not materially impact on the reported numbers. The methodologies that have been applied are fit for purpose. We are pleased to provide assurance that, overall, we consider the information published by Bristol Water has been compiled using information which is accurate, reliable and complete. We have traced information to data sources and information systems. We consider the published metrics provide a fair and reasonable account of Bristol Water’s mid-year performance in 2016/17 and progress towards achieving its 2020 targets. We confirmed that information is soundly based, for most PCs using Company gathered audited data as the source information. Where information is not sourced from Company gathered audited data, we confirmed robust systems are in place to capture the required information.

**Jonathan P Archer**

Regulation Director, Infrastructure

ATKINS
**Mid-Year Performance 2017/18**

**Performance summary**

The graphic below is a summary of Bristol Water's performance commitments' mid-year\(^3\) performance for 2017/18\(^4\). We also provide a comparison compared to others in the industry (the top 25% labelled as “upper quartile” and the bottom 25% labelled as “lower quartile”).

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<table>
<thead>
<tr>
<th>Performance commitment</th>
<th>Unit</th>
<th>15/16</th>
<th>16/17</th>
<th>Trend</th>
<th>17/18 half-year</th>
<th>17/18 full-year target</th>
<th>On track for 17/18 year end target?</th>
<th>Comparison to others</th>
<th>Lower Quartile</th>
<th>Upper Quartile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unplanned customer minutes lost</td>
<td>Minutes/prop/year</td>
<td>15.5</td>
<td>13.1</td>
<td>60.04</td>
<td>12.8</td>
<td>No - target missed</td>
<td></td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Asset reliability - infrastructure</td>
<td>Stable</td>
<td>Stable</td>
<td>Stable</td>
<td>Stable</td>
<td>Stable</td>
<td>Yes</td>
<td></td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Asset reliability - non-infrastructure</td>
<td>Stable</td>
<td>Stable</td>
<td>Stable</td>
<td>Stable</td>
<td>Stable</td>
<td>Yes</td>
<td></td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Population in centres &gt;25,000 at risk from asset failure</td>
<td>Population</td>
<td>289,589</td>
<td>289,589</td>
<td>289,589</td>
<td>9,063</td>
<td>Yes</td>
<td></td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Security of supply index (SOSI)</td>
<td>%</td>
<td>100</td>
<td>100</td>
<td>N/A</td>
<td>100</td>
<td>N/A</td>
<td></td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Hosepipe ban frequency</td>
<td>Days</td>
<td>1.5</td>
<td>3.1</td>
<td>N/A</td>
<td>10.2</td>
<td>N/A</td>
<td></td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Mean zonal compliance (MZC)</td>
<td>%</td>
<td>99.93</td>
<td>99.97</td>
<td>99.94</td>
<td>100</td>
<td>Yes</td>
<td></td>
<td>99.96</td>
<td>99.98</td>
<td>99.98</td>
</tr>
<tr>
<td>Negative water quality contacts</td>
<td>Contacts (comparators per 10,000 customers)</td>
<td>2,329</td>
<td>2,162</td>
<td>886</td>
<td>2,322</td>
<td>Yes</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Leakage</td>
<td>Ml/d</td>
<td>44</td>
<td>46</td>
<td>45.2</td>
<td>45</td>
<td>Yes</td>
<td>N/A</td>
<td>121</td>
<td>88</td>
<td></td>
</tr>
</tbody>
</table>

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3 MZC, Negative Water Quality Contacts and Waste Disposal Compliance are reported in calendar years; the mid-year figure reflects our performance up until June 2017

4 Our reported leakage figure reflects our revised calculation of the Non-Household Night Use component, which is consistent with our 2016/17 reported figure
<table>
<thead>
<tr>
<th>Performance commitment</th>
<th>Unit</th>
<th>15/16</th>
<th>16/17</th>
<th>Trend</th>
<th>17/18 half-year</th>
<th>17/18 year target</th>
<th>On track for 17/18 year end target?</th>
<th>Comparison to others</th>
<th>Lower Quartile</th>
<th>Upper Quartile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per capita consumption</td>
<td>Litres/ head/day</td>
<td>141.1</td>
<td>144.1</td>
<td>N/A</td>
<td>143.6</td>
<td>N/A</td>
<td>No actions in place</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meter penetration</td>
<td>%</td>
<td>47.3</td>
<td>49.6</td>
<td>51.7</td>
<td>58.8</td>
<td>No</td>
<td>No</td>
<td></td>
<td>42</td>
<td>69</td>
</tr>
<tr>
<td>Total carbon emissions</td>
<td>kgCO2e/ person</td>
<td>35</td>
<td>32</td>
<td>15.96</td>
<td>23</td>
<td>No</td>
<td>No</td>
<td></td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Raw water quality</td>
<td>Improving/Stable/Marginal/Deteriorating</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No</td>
<td></td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Biodiversity index</td>
<td>Improving/Stable/Marginal/Deteriorating</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No</td>
<td></td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Waste disposal compliance</td>
<td>%</td>
<td>96.1</td>
<td>95.8</td>
<td>97.8</td>
<td>100</td>
<td>No</td>
<td>No</td>
<td></td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Percentage of customers in water poverty</td>
<td>%</td>
<td>0.4</td>
<td>0.9</td>
<td>N/A</td>
<td>1.9</td>
<td>N/A</td>
<td>No</td>
<td></td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Service Incentive Mechanism (SIM)</td>
<td>Top 5</td>
<td>82.1</td>
<td>85.9</td>
<td>83.1</td>
<td>Top 5</td>
<td>No</td>
<td>No</td>
<td></td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>General satisfaction from surveys</td>
<td>%</td>
<td>83</td>
<td>86</td>
<td>N/A</td>
<td>93</td>
<td>N/A</td>
<td>No</td>
<td></td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Value for money</td>
<td>%</td>
<td>70</td>
<td>72</td>
<td>68.9</td>
<td>71</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Ease of contact from surveys</td>
<td>%</td>
<td>93.1</td>
<td>94.4</td>
<td>92.9</td>
<td>96.5</td>
<td>No</td>
<td>No</td>
<td></td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Negative billing contacts</td>
<td>Contacts/year</td>
<td>2,301</td>
<td>3,096</td>
<td>1,383</td>
<td>2,315</td>
<td>No</td>
<td>No</td>
<td></td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Unplanned Customer Minutes Lost

This performance commitment is measured as the total number of minutes that customers have been without a supply of water in the year, through unplanned interruptions to supply, divided by the total number of properties served by us in the year.

Our mid-year performance of 65.04 minutes lost is due principally to major interruption events at Willsbridge (54.74 minutes), Sea Mills (4.55 minutes), Withywood (1.38 minutes) and Meare (0.89 minutes). We have significantly exceeded our year-end target of 12.8 minutes lost per customer due to these exceptional incidents. We will therefore miss our full year target and incur a financial penalty. We have investigated the root cause of these incidents in order to identify other locations where similar events are likely to occur, so that we can put measures in place to try to prevent these bursts from happening, or take steps to minimise the impact on our customers if they do.

Without the Willsbridge and Sea Mills events our current end of year forecast would be 13.05 minutes lost, which would be just outside our target. We have taken a number of operational initiatives to improve our response and recovery times, including new tools and techniques to allow “live” isolations of mains following burst mains and rapid re-zoning of the network.

Asset Reliability – Infrastructure

This measure is broadly based on Ofwat’s historic serviceability assessment; it relates to the total number of bursts in each year and the number of properties assessed to be at risk of low pressure. We expect to meet the control limit targets for both of these two sub-indicators.

We plan to introduce new monitoring technology to identify lengths of mains which are most critical i.e. those most likely to burst. By introducing this technology we will be able to target replacement more proactively and efficiently.

Asset Reliability – Non-Infrastructure

This measure relates to unplanned maintenance events and turbidity. We expect to meet the control limit targets for both of these two sub-indicators.

Population at Risk of Assert Failure

This measures the total number of consumers in areas of population of greater than 25,000 who are at risk of interruption to their water supply in the event that a critical asset, such as a treatment works, is unable to operate. We are on-track to deliver the Southern Resilience Scheme before the end of 2017-18. This will significantly reduce the number of customers at risk. The first section of the pipeline is planned to be in service this autumn.

Security of Supply Index (SOSI)

This measure is used to assess the security of companies’ supplies. It takes into account the supply of water that we have available and demand from customers. Security of supply is calculated as an index out of 100.
As this measure is based on annual calculations we do not update it as part of the mid-year review.

**Hosepipe Ban Frequency**
This measures the likelihood in any one year that temporary usage restrictions, such as on the use of hosepipes, will be implemented.

As this measure is based on annual calculations a mid-year position is not reported. A year-end forecast cannot be made until December due to the very weather-dependent nature of reservoir refill, after dry weather last winter and in the spring and early summer.

**Mean Zonal Compliance (MZC)**
The MZC performance commitment is a water quality compliance measure based on a series of 39 parameters determined by the Drinking Water Inspectorate (e.g. levels of lead, nitrate levels etc.). It is calculated based on sampling each parameter at supply points and customer taps in a number of specified zones.

Our year-end forecast performance will not meet our target of 100%. The main cause of lower performance than in previous years is due to nickel failures in samples taken at customer taps. As nickel has lower regulatory sampling frequency, these failures have a much greater impact on our MZC score. The nickel failures are associated with the taps at the individual premises; these failures are outside of our control. If the three nickel failures we have had to date are excluded from the calculation, our year-end forecast would be above the 99.96% threshold below which a financial penalty is incurred.

MZC is being replaced as a measure of water quality by a new Compliance Risk Index (CRI). The CRI assesses each water quality failure on the population affected and the potential health impact. Our performance on this measure is amongst the best in the industry and has continued to get even better so far in 2017. The measure is calculated on a calendar year, and the graph below shows the performance up to the end of October 2017.

![Bristol Water Compliance Risk Index](image-url)
Negative Water Quality Contacts
This measures the total number of consumer contacts (telephone, letter and email) about the appearance, taste and odour of the water for the calendar year.

Performance so far this year has been good and we expect to be 18% below our target. During the winter months reduced water temperatures and increased bursts can increase taste and discoloured water complaints depending on the weather, but we expect to carry on performing well.

Leakage
The leakage performance commitment is defined as the amount of water that enters the distribution system but is not delivered to customers; because it is lost from either the company's or customers' pipes. Leakage is measured in megalitres per day (Ml/d).

This metric represents one of our highest performing service areas, compared to other companies. We have remained within the top 5 companies for performance levels between 2013/14 and 2016/17.

Based on performance at the start of 2017/18, we have mobilised additional resources to reduce outstanding leak repairs and additional active leakage control activities have been undertaken with the aim to bring leakage levels in line with the annual target. This reflects our commitment to reduce leakage by 12% between 2015 and 2020. Our reported leakage includes the impact of technical improvements to how leakage is measured. In our annual report we will show leakage before and after the impact of this improved data. The table below shows this impact at mid-year.

<table>
<thead>
<tr>
<th>Approach</th>
<th>Decimal Places</th>
<th>Unit</th>
<th>16/17</th>
<th>17/18 mid-year</th>
</tr>
</thead>
<tbody>
<tr>
<td>After technical improvements to leakage</td>
<td>2</td>
<td>Ml/d</td>
<td>46.4</td>
<td>45.2</td>
</tr>
<tr>
<td>measurement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Before technical improvements to leakage</td>
<td>2</td>
<td>Ml/d</td>
<td>47.4</td>
<td>46.7</td>
</tr>
<tr>
<td>measurement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Per Capita Consumption (PCC)
Per Capita Consumption is defined as the average amount of water used by each of the company's household consumers each day, measured as litres per head per day (l/h/d).

Our performance for this metric has remained stable over the last three years. At present there is a risk that we may not meet our committed performance levels, as we are targeting a reduction in PCC. Although it remains steady over the past three years, our PCC is relatively high compared to other companies. Our commitment to improvement in this measure is significantly driven by our plans to increase the level of meter penetration, together with activities to promote the efficient use of water.
**Meter Penetration**

This performance commitment is defined as the proportion of total properties of billed household customers that are charged for water on a measured basis.

Our current performance levels do not meet our target and we are likely to incur a financial penalty, following a slower than expected start to our metering programme. We are increasing promotion of metering. Our 'Beat the Bill' campaign is now well underway and on target to meter c.1,200 properties across Filton and Lockleaze.

We plan to roll out the campaign across the remaining c.69,000 other available locations. The 'Beat the Bill' campaign is a way for households to see if they could save money on their water bill if a meter was fitted. As part of this campaign we are putting a water meter in place so we can tell customers exactly what the difference between your normal bill and a metered bill would be. Customers can then have the choice to switch to a meter, or if they want to carry on with their existing billing, they don’t need to do anything.

Our educational campaigns on Breeze Radio and Heart Radio continue to be run in parallel with relevant social media campaigns throughout the remainder of the year.

**Total Carbon Emissions**

This measures our total carbon emission figure, divided by the population supplied; measured as kgCO2e/person.

Performance against this measure has continually improved since 2015/16, however we have not to date met our committed performance level. Performance against this metric is to an extent outside of our control, as it is dependent on a grid emissions factor for the energy we use. Our approach to improving our performance is aligned with our work towards achieving our ISO 50001:2001 accreditation. To achieve this we need to be showing “continual improvement” on the reduction of our kWh, which reduces our carbon emissions. The ways in which we are implementing energy savings include:

- Increasing Pumping Efficiency
- Power Save during peak use periods
- Site surveys to reduce power consumption
- Solar energy generation at Purton Treatment Works and other locations
- Optimising the use of power and chemicals
- Our Brainwaves scheme that involves all staff in continuous improvement, including identifying energy saving ideas.
Raw Water Quality of Sources
This measure is defined as an assessment of the quality of the company's raw water. We have developed an approach that enables changes in raw water quality of sources to be assessed each year with reference to previous rolling averages. We anticipate through catchment management work we will be able to report a 'marginal' performance in 2017/18, which would meet our committed performance level.

Biodiversity Index
This measure is used to assess increases in biodiversity at sites we own. We plan to undertake the following activities, which will contribute to the improvement of the Biodiversity Index score:

1. Woodland habitat enhancement at Chew Stoke (tree planting)
2. Stream restoration at Chew Stoke (diverting water flow to increase the wetted stream habitat downstream of the spill way)
3. Ditch restoration and grass bank improvements at Barrow Tank number 3
4. Orchard provision at Windmill Hill reservoir

When all these activities are completed, we forecast that performance against this measure will be assessed as ‘improving’, which would meet our committed performance level for 2017/18.

Waste Disposal Compliance
This measure is used to assess the management of discharges from our sites to ensure that they are consistent with a sustainable environmental impact.

Since 2013 there has been a deteriorating trend, which we are taking corrective action to resolve, although we may still not meet our year-end target.
Percentage of Customers in Water Poverty

We defined water poverty as the percentage of households within our supply area for whom water charges represent more than 2% of their disposable income, defined as gross income less income tax.

As this measure is based on annual calculations we have not updated our performance for the year so far. We are seeking to expand our social tariff support, which will help customers for whom the bill is genuinely unaffordable. We also work closely with Wessex Water and Pelican (the company jointly owned by Bristol Water and Wessex Water that provides household billing and customer contact services for both companies) to review:

- How the partners that we fund are performing on their referrals of customers onto social tariffs;
- Campaigns to raise awareness of our social policies;
- The level of funding needed for specific support measures; and
- The on-going training and support we offer our partners.

Service Incentive Mechanism (SIM)

This is Ofwat’s measure for comparing the customer service performance of water companies in England and Wales.

Our performance in the customer survey component of SIM is below the level we achieved last year, and our rank may also fall as other companies improve their performance. We expect our overall SIM score to improve by the year end, but based on the half year it will be challenging to achieve the “top 5” performance we target.

The additional contacts and complaints we received because of the two major bursts that caused interruption to customer supplies explain around two-thirds of the gap to our target. So we are also taking action to ensure we quickly restore our position to be amongst the best in the industry at this measure of performance. It will also improve the other measures of service that we target.

We are increasing our efforts and initiatives around our “Customer 1st” project, which will make a range of improvements in many customer ‘touch points’. Our focus is to improve the culture of the organisation by putting the customer at the heart of every decision. It is often the little things which make the biggest difference to our customers. We are working on over 40 things which we can do quickly to give a better experience. For example, we are continuing to work on new customer channels, such as a leaflet that explains what to expect from us when we are working in an area. We are also innovating to better equip our teams to resolve issues first time and to minimise the impact of essential works on the communities we serve. Sometimes the simplest solution such as a splash net on barriers will be enough to make a difference.
Alongside this programme, we are continuing to invest in new technology to make it easier for you to get in contact with us. Early next year we will pilot our new web chat platform for customers who are having an issue with their water supply, or would like to switch to a meter. Customers can already chat to our billing team online.

**General Satisfaction from Surveys**

This measure relates to the percentage of customers responding to our annual household customer tracking survey who rate their satisfaction in respect of the company’s service as excellent, very good or good.

We are increasing our efforts and initiatives around our “Customer 1st” project which will make a range of improvements in many customer ‘touch points’.

As this measure is based on annual calculations a data audit was not included as part of the mid-year review. This is a challenging target to meet and whilst performance is improving we did not meet the target in 2015/16 or 2016/17. The target performance level for 2017/18 is to achieve a satisfaction rate of 93%.

**Value for Money**

This measure is calculated as the percentage of respondents to our monthly customer survey who consider the value for money we provide to be ‘very good’ or ‘good’.

We have experienced relatively stable results since incorporating this question into our monthly tracking research. This measure has however been impacted by the major interruption events, such as at Willsbridge and Sea Mills, that have taken place this year.
Ease of Contact
This measure is calculated as the percentage of respondents to our monthly customer survey who consider the ease of contact to our operational contact centre to be ‘very good’ or ‘good’.

We are increasing our efforts and initiatives around our “Customer 1st” project which will make a range of improvements in many customer ‘touch points’.

Negative Billing Contacts
This measures the number of ‘unwanted’ calls received. An ‘unwanted’ customer contact is defined by Ofwat within the SIM. The top 5 causes of unwanted contacts have been reducing in recent months. These causes include where bills are not received, queries on whether payments have been received and refund requests. We are working in partnership with Pelican to ensure our year-end forecast performance level is achieved. Insight from complaints, social media (such as Twitter) and on-going research is also helping us to build a better picture of how we improve this measure for customers. Performance has improved from last year, but the year-end target will be challenging to achieve.

Assurance of information published

Internal Assurance
We use a thorough system of controls to make sure that the information we report and publish is as accurate as possible. Each of our performance commitments have a specific owner and reviewer, responsible for production and updating the reporting methodology statement. Data owners and reviewers are required to provide signed confirmation that the data has been compiled in accordance with the relevant methodology, and that the data is a true representation of the facts. This form provides the opportunity for the data owner to identify any concerns with the quality of the data, for investigation by senior managers and Directors.

A committee of executive Directors reviews key data and information before it is published. Progress against key metrics is reviewed in detail monthly so that emerging trends in both performance and data quality can be addressed. Major regulatory submissions, including annual reports, tariffs, accounts and business plans are subject to Board review and approval prior to submission.

We also use external expert auditors to review our methods, systems and processes for reporting key data and information. In particular, the engineering consultancy, Atkins, provides technical assurance on our regulatory submissions, and financial auditors, PwC, audit our key financial data. We also have an internal audit function, which is currently outsourced to Mazars, that reviews our compliance with our governance and assurance
procedures. These auditors provide reports to our Board to provide confidence in the accuracy of the information produced. Our main regulatory submissions are subject to sign off by the Board before we send them to Ofwat.

**External assurance**
The data published for each performance commitment and the methodology documents used to determine the collation of the data were reviewed by Atkins as part of their 2017/18 mid-year audit. These audits tested:

1. Our internal control systems to produce the submission;
2. Whether reporting appears to align with relevant guidance; and
3. Whether data has been compiled in accordance with our methods and procedures.

Following this audit, we have begun work to address concerns raised in the assessment of some methodologies. This work is following a set programme, intended to improve all methodology documents to a satisfactory standard by year end reporting for 2017/18. As part of their review of our 2017/18 mid-year performance data, Atkins again reviewed the progress in updating methodology documents. Measures which are assessed based on an annual calculation were not reviewed at mid-year. The outcome of these two audits on our data and methodology documents, as well the assessments for previous years, is presented in tables 1 and 2 below.

**Table 1 – Atkins’ Data Categories for each Performance Commitment**

<table>
<thead>
<tr>
<th>Performance Commitment</th>
<th>Data</th>
<th>2015-16</th>
<th>2016/17 Mid-Year</th>
<th>2016-17</th>
<th>2017/18 Mid-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unplanned customer minutes lost</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Asset reliability - infrastructure</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Asset reliability - non-infrastructure</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Population in centres &gt;25,000 at risk from asset failure</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Security of supply index (SOSI)</td>
<td>Green</td>
<td>Not included in audit</td>
<td>Green</td>
<td>Not included in audit</td>
<td></td>
</tr>
<tr>
<td>Hosepipe ban frequency</td>
<td>Green</td>
<td>Not included in audit</td>
<td>Green</td>
<td>Not included in audit</td>
<td></td>
</tr>
<tr>
<td>Mean zonal compliance (MZC)</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Negative water quality contacts</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Leakage</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Per capita consumption (PCC)</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Meter penetration</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Total carbon emissions</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Raw water quality of sources</td>
<td>Green</td>
<td>Not included in audit</td>
<td>Green</td>
<td>Green</td>
<td></td>
</tr>
</tbody>
</table>
This assessment provides us with confidence that there are no material issues with the quality of our data systems for reporting on our performance measures.

Table 2 – Atkins’ Methodology Categories for each Performance Commitment

<table>
<thead>
<tr>
<th>Performance Commitment</th>
<th>2015-16</th>
<th>2016/17 Mid-Year</th>
<th>2016-17</th>
<th>2017/18 Mid-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unplanned customer minutes lost</td>
<td>Amber</td>
<td>Amber</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Asset reliability - infrastructure</td>
<td>Amber</td>
<td>Amber</td>
<td>Amber</td>
<td>Green</td>
</tr>
<tr>
<td>Asset reliability - non-infrastructure</td>
<td>Amber</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Population in centres &gt;25,000 at risk from asset failure</td>
<td>Amber</td>
<td>Amber</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Security of supply index (SOSI)</td>
<td>Amber</td>
<td>Not included in audit</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Hosepipe ban frequency</td>
<td>Amber</td>
<td>Not included in audit</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Mean zonal compliance (MZC)</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Negative water quality contacts</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Leakage</td>
<td>Amber</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Per capita consumption (PCC)</td>
<td>Amber</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Meter penetration</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Total carbon emissions</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Raw water quality of sources</td>
<td>Amber</td>
<td>Not included in audit</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Biodiversity index</td>
<td>Amber</td>
<td>Green</td>
<td>Amber</td>
<td>Green</td>
</tr>
<tr>
<td>Waste disposal compliance</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
</tr>
</tbody>
</table>
Atkins has published a report that further explains their assessments for each of our performance commitments. Amber means that although improvements can be made to the data or the methodology, this does not alter the reported performance. Our Amber on SIM reporting identified that we needed to update the methodology for this new mid year report. Failure of methodology or data that might result in incorrect data being reported would be highlighted as “red”.

Bristol Water will, over the next six months, put plans in place to make vital improvements to the way we work, in order to improve on our performance. We will publish our year-end performance in July 2018.
The Incident

- Bristol Water identified increased flows through a flow meter at 11.30pm on 18 July and started receiving customer calls about loss of water at 1.16am on 19 July.
- Bristol Water arrived in Willsbridge, on the outskirts of Bristol, to discover large amounts of surface water with complicating site factors.
- The South Bristol Ring Main, which transports water between North and South Bristol, had to be isolated to allow the cause to be safely investigated.
- The cause of the incident - a burst main in Willsbridge - was confirmed within an hour of the initial reports. It was unique to the site and appears to have been the result of ground movement and the complex pipework at the pumping station.
- The Willsbridge site was made safe by 2.30pm on 19 July, which allowed re-routing of supplies for other customers to start. Supplies were restored to customers without the burst being fixed.
- 35,000 properties lost supplies because of the burst, but the Ring Main and the re-routing of water meant only 14,000 were without water by 7am on 19 July.
- 8,000 further properties had supplies restored around 10pm on 19 July with the remainder by 5.30am on 20 July.

Operational Response

- By 2am on 19 July, a major incident response launched.
- Key agencies and stakeholders were notified overnight as the situation and response were assessed.
- Proximity of gas mains, power cables, hazardous weather conditions (lightning strikes) and surface water added complexity to the incident, requiring close collaboration with BT and Western Power Distribution.
- By the morning of 19 July, Bristol Water had fully engaged all remaining stakeholders, which included a status call by early evening.
- Final update on the incident was cascaded to agency partners and stakeholders shortly after 9am on 20 July.
- The incident was formally closed at about 2.30pm that afternoon.

Customer Support

- Customer contacts peaked between 7am - 8am at 968 calls.
- A second call centre to manage the volume of calls was opened at 6am on 19 July.
- Bottled water was delivered to customers requiring additional support from 7am.
- At just after 7.30am, all other affected customers with registered mobile numbers received details of the incident.
- Five temporary water supply locations, each with a number of water bowser, were set up from 11.30am to mid afternoon on 19 July. The bowser was frequently replenished to allow customers to take as much water as they needed.
- These were staffed by Bristol Water employees, who gave customer updates.
• The Communications Team was quick to respond.
• Updates to the Bristol Water corporate site, social media channels and the employee intranet were made by 3am on 19 July.
• Three members of the Comms team on ‘incident alert’ for 24 hours to allow social media channels to be effectively monitored and customer interactions proactively managed.

Customer Communications

• A recent customer survey included some who were affected by the burst.
• Of those affected surveyed, 62% were very or fairly satisfied, with how the burst was handled.
• Together with social and other media views, generally customers were satisfied with our response and most accepted that such events may occasionally happen. But, we recognise there is always room to improve communication and response.

Customer Satisfaction

Summary and Learnings

• The Willsbridge burst was a complex repair, hampered by challenging weather conditions and complicating site factors.
• Around 70 people were involved in response to the incident.
• Water was restored to 35,000 properties within 29 hours of the initial reports.
• More than 6,995 customers received support from contact centre staff or through social media.
• Despite the overall operational success and customer satisfaction, Bristol Water was able to draw four learnings from the experience:

1. More focus could be given to the impact of operational decisions on customers when restoring supplies and cascaded more effectively to further increase satisfaction.
2. Stakeholders were informed of the incident, but the process for doing this could be improved further.
3. Review processes to improve timing and accuracy of all customer communication channels, so that accurate information can be kept flowing, even when there is no significant update. In this type of scenario, customers are keen to know about how we mobilise in response and who is involved, not just information about their water supplies.
4. The incident will inform our review of how alternative water supplies are provided.