

Review of Bristol Water's performance during 2016/17

A1: Unplanned customer minutes lost

Unit	Target 15/16	Actual 15/16	Target 16/17	Actual 16/17	Target 17/18	Target 18/19	Target 19/20
mins/prop/yr	13.40	15.49	13.1	13.12	12.8	12.5	12.2

Detailed definition of performance measure: The total number of minutes that customers have been without a supply of water in the year, through unplanned interruptions, divided by the total number of properties served by the company in the year. Expressed as minutes/property; thus low is good. The incentive associated with this commitment is financial (reward and penalty).

The Challenge Panel is pleased to note that Bristol Water's performance against this measure improved over 2015/16. The reported number for 2016/17 was 13.12 minutes per property per year, just within the target of 13 minutes per property per year. Last year's reported performance was 15.49 minutes per property per year.

The Challenge Panel recognises this performance against this measure can be significantly impacted by large unplanned supply interruptions. There were no such interruption events during the 2016/17.

Atkins has confirmed that the company's reporting process for this measure is robust and the resulting data is sound.

Some source data for this measure comes from third parties such as Bristol Water's operational contractors. The Challenge Panel notes that Atkins' assurance audits do not cover these data and assume that the company's contractual arrangements with third parties and the company's audits of these ensure the data are accurate. The Challenge Panel has suggested that the company's information governance policies and procedures should be extended to third party data to ensure that robust data are provided and that the reporting process is efficient.

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

Unit	Target 15/16	Actual 15/16	Target 16/17	Actual 16/17	Target 17/18	Target 18/19	Target 19/20
n/a	Stable						

Detailed definition of performance measure: A qualitative measure of the capability of the company's infrastructure assets (generally the water mains and other underground assets) to deliver an expected level of service to consumers and to the environment. The assessment is based on the number of water mains bursts and the number of properties at risk of receiving low water pressure. The reliability of the company's infrastructure assets in 2016/17 was assessed to be 'stable' in line with the target for the year.

The incentive associated with this commitment is financial (penalty only).

The Challenge Panel notes that Atkins considers that, whilst the data associated with the number of properties at risk of low pressure is sound, the company's procedures for reporting this information are out of date and there is insufficient evidence of information checking (also that more checking should be undertaken). There is also the need for clearer ownership of information at source. There is a risk that information is not repeatable as a consequence of these shortcomings.

Similar findings associated with ownership and governance relating to mains burst information have also been noted by Atkins.

The Challenge Panel will monitor the company's response to these findings during the coming year

A3: Asset reliability – non-infrastructure

Unit	Target 15/16	Actual 15/16	Target 16/17	Actual 16/17	Target 17/18	Target 18/19	Target 19/20
n/a	Stable						

Detailed definition of performance measure: A qualitative measure of the capability of the company's non-infrastructure assets (generally the above ground assets such as treatment works and service reservoirs) to deliver an expected level of service to consumers and to the environment. The assessment is based on the number of unplanned non-infrastructure asset maintenance events and the turbidity of water at treatment works. The reliability of the company's non-infrastructure assets in 2016/17 was assessed to be 'stable' in line with the target for the year.

The incentive associated with this commitment is financial (penalty only).

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

Unit	Target 15/16	Actual 15/16	Target 16/17	Actual 16/17	Target 17/18	Target 18/19	Target 19/20
pop at risk	288,589	288,589	288,589	288,589	9,063	9,063	9,063

Detailed definition of performance measure: The total number of consumers in areas of population greater than 25,000 who are at risk of interruptions to their water supply in the event of a failure of a critical asset such as a treatment works. A low number is good.

The incentive associated with this commitment is financial (reward and penalty).

The company's performance in 2016/17 was in line with the target. The Challenge Panel has been informed that Bristol Water is on schedule to reduce the population at risk to 9,063 next year s required.

C1: Security of Supply Index

Unit	Target 15/16	Actual 15/16	Target 16/17	Actual 16/17	Target 17/18	Target 18/19	Target 19/20
%	100	100	100	100	100	100	100

Detailed definition of performance measure: This is the Ofwat measure used to assess the security of the company's water supplies. It takes into account the supply of water available to the company and the demand from its customers. The index is expressed as a percentage. 100% is good.

The incentive associated with this commitment is reputational.

The company's performance in 2016/17 was 100% in line with the target.

C2: Hosepipe ban frequency

Unit	Target 15/16	Actual 15/16	Target 16/17	Actual 16/17	Target 17/18	Target 18/19	Target 19/20
days	10.2	1.5	10.2	3.1	10.2	10.2	10.2

Definition of performance measure: The likelihood in any one year that temporary usage restrictions such as the use of hosepipes will be implemented. This is expressed as return period in expected days per year for a defined severity of event. A low number is good. The incentive is financial penalty only.

The reported return period for 2016/17 was 3.1 days per year, a rise from 1.5 days per year in 2015/16. The target for 2016/17 was 10.2 days per year so the actual performance was well within this.

The Challenge Panel notes the deterioration in reported performance from the previous year but recognises that the measure expresses the risk of a hosepipe ban, rather than the incidence. The increased risk in 2016/17 is due to increased output from the company's treatment works compared to the previous year, probably due to increased demand caused by the dry weather.

Atkins informed the Challenge Panel that Bristol Water updated its process documentation and source data for this measure during the year in response to last year's audit findings. The Challenge Panel welcomed these improvements. The resulting methodology is now considered to be satisfactory and the reported data for 2106/17 robust.

D1: Mean zonal compliance

Unit	Target 15/16	Actual 15/16	Target 16/17	Actual 16/17	Target 17/18	Target 18/19	Target 19/20
%	99.96	99.93	99.96	99.97	100	100	100

Definition of performance measure: Statutory indicator used by the DWI to assess overall water quality compliance each calendar year across all water companies in England and Wales. Expressed as a percentage; thus high is good. The incentive associated with this commitment is financial (penalty only).

The Challenge Panel is pleased to see that Bristol Water's performance in 2016 against this measure was 99.97% against a target of 99.6%. Performance last year was 99.93% so has improved.

The compliance of water from the company's assets was very high in 2016, similar to the previous year. The overall performance against the measure improved from last year partly due to a lower number of failures on customers' pipework (over which Bristol Water has little control).

Atkins has confirmed the reporting process for this measure is fit for purpose and the resulting data are sound. It has recommended that internal data checks are documented.

E1: Negative water contacts

Unit	Target 15/16	Actual 15/16	Target 16/17	Actual 16/17	Target 17/18	Target 18/19	Target 19/20
contacts/year	2,422	2,329	2,409	2,162	2,322	2,275	2,221

Definition of performance measure: The number of customer complaints received each calendar year in relation to the taste, colour and odour of customers' water supply. It excludes any discoloured water complaints associated with events notified to the DWI but includes 'air in supply' complaints. A low number

is good. The incentive associated with this commitment is financial (reward and penalty).

The Challenge Panel is pleased to note that Bristol Water’s performance against this measure has improved over 2015. 2,162 negative water contacts were recorded in 2016, 167 fewer than the previous year. The target for 2016 was 2,409 negative water contacts.

Atkins has confirmed the company’s reporting process for the measure and the resulting numbers are robust.

F1: Leakage

Unit	Target 15/16	Actual 15/16	Target 16/17	Actual 16/17	Target 17/18	Target 18/19	Target 19/20
MI/day	48	44.2	47	46.4	45	44	43

Definition of performance measure: 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 the customers’ pipes. Leakage is measured in megalitres per day (MI/d). A low figure is good. The incentive is financial (reward and penalty).

During the year the company reviewed its leakage calculation methodology and updated and increased its estimate of non-household night use, one the components that make up the calculation. This had a resulting negative 2.5 MI/d impact on the reported leakage figure compared to using the former estimate of non-household night use. The company explains in detail in its Annual Performance Report the rationale for revising its estimate and the comparability and consistency of this with the leakage targets included in its Final Determination. The company has informed Ofwat of its revised assumptions.

Atkins has reviewed the revised estimate, and other adjustments to the leakage methodology made by Bristol Water, and concludes that the basis of the latest reported leakage figure is more aligned to the Final Determination performance commitment. It considers the revised methodology and the reported leakage to be robust.

The Challenge Panel cannot comment on the technicalities of the leakage calculation but takes comfort in Atkins’ findings.

The reported leakage for 2016/17 was 46.4 MI/d, just within the target of 47MI/d. The reported leakage for 2015/16 was 44.2 MI/d but this is not comparable with this year’s figure because of the change in methodology described above.

Bristol Water has informed the Challenge Panel that it will be assigning more resources to reducing leakage in the coming year. The Challenge Panel will monitor the effect of this accordingly.

G1: Meter penetration

Unit	Target 15/16	Actual 15/16	Target 16/17	Actual 16/17	Target 17/18	Target 18/19	Target 19/20
%	50.4	47.3	54.8	49.6	58.8	62.5	65.9

Definition of performance measure: The proportion of total properties of billed household customers that are charged for water on a measured basis. Expressed as a percentage; thus high is good. The incentive associated with is measure is financial.

As reported last year Bristol Water made a slow start implementing its plan to install meters on change of occupancy. Despite increasing its meter penetration from 47.3% to 49.6% during the year the company fell short of its 2016/17 target of 54.8%. The associated financial penalty incurred for 2016/17 is £0.152m (in addition to the £0.118m incurred last year).

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.

The Challenge Panel welcomed the opportunity to review the revised plan. It has 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 and the Challenge Panel will monitor progress during the coming year.

Atkins has confirmed that both the company's reporting methodology and the resulting data for this measure are robust. The Challenge Panel welcomes this as Atkins reported last year that the reporting methodology needed improvement.

G2: Per capita consumption

Unit	Target 15/16	Actual 15/16	Target 16/17	Actual 16/17	Target 17/18	Target 18/19	Target 19/20
litres/head/day	145.4	141.1	144.5	144.1	143.6	142.8	142.0

Definition of performance measure: The average amount of water (expressed in litres) used by each consumer each day. A low figure is good. The incentive associated with this commitment is reputational.

The per capita consumption reported for 2016/17 was 144.1 litres per head per day. The target for the year was 144.5 litres per head per day so was met. The reported consumption for the previous year was 141.1 litres per head per day. Bristol Water informed the Challenge Panel that the increase was probably due to the drier weather experienced in 2016/17 which resulted in higher demand and usage such as garden watering.

Last year Atkins recommended that Bristol Water improve the documentation of its reporting methodology for per capita consumption. The Challenge Panel is pleased to learn that this was addressed during the year and that Atkins considers the process to be materially sound and the reported figure for 2016/17 is robust. Further refinements to the methodology are recommended by Atkins however and the Challenge Panel will monitor progress during the coming year.

H1: Total carbon emissions

Unit	Target 15/16	Actual 15/16	Target 16/17	Actual 16/17	Target 17/18	Target 18/19	Target 19/20
kgCO ₂ e/person	32	35	25	32	23	22	20

Definition of performance measure: The total carbon emissions from the activities of the company and its contractors expressed in kilogrammes of CO₂ (carbon dioxide) equivalent divided by the population supplied; thus low is good. There is no financial penalty or reward associated with this measure.

Bristol Water reduced its carbon emissions from 35 to 32 kgCO₂e per person from last year but missed the 2016/17 target of 25 kgCO₂e per person. The Challenge Panel was informed 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. It is preparing a revised economic case but it has said 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 and looks forward to reviewing Bristol Water’s proposals.

Atkins has confirmed that the company’s reporting methodology for this measure is adequate and the resulting data reasonable.

H2: Raw water quality of sources

Unit	Target 15/16	Actual 15/16	Target 16/17	Actual 16/17	Target 17/18	Target 18/19	Target 19/20
n/a	Deteriorating	Deteriorating	Deteriorating	Deteriorating	Marginal	Marginal	Stable

Detailed definition of performance measure: A qualitative measure of the quality of the company’s sources of raw water that are at risk due to increased levels of pesticides and nutrients in their catchments. The assessment is made using a basket of chemical and physiological measures. The quality of the company’s raw water sources in in 2016/17 was assessed to be ‘deteriorating’ in line with expectation.

The incentive associated with this commitment is reputational.

The Challenge Panel notes that next year’s performance is forecast to be ‘marginal’ (meeting target).

H3: Biodiversity Index

Unit	Target 15/16	Actual 15/16	Target 16/17	Actual 16/17	Target 17/18	Target 18/19	Target 19/20
n/a	Improving						

Definition of performance measure: Bristol Water is required to carry out regular surveys at its sites to assess the level of biodiversity. This will involve quantifying the area of specific habitats available, together with their quality, importance and presence of significant species. The company will combine these measurements to create a quantitative “Biodiversity Index” for each of its sites and an aggregate Biodiversity Index for its overall landholdings. The Biodiversity Index calculation is: [Hectares of priority habitat or metres of linear habitat] x [status grade of this habitat]. The targets associated with this commitment are related to the company ‘improving’ its Biodiversity Index each year. The associated incentive is reputational.

Bristol Water achieved an ‘improving’ Biodiversity Index in 2016/17, in line with its target. The Challenge Panel welcomes this achievement which it understands involved tree planting and working with local schools.

The Challenge Panel notes that the Index is still under development and Atkins considers the tool that Bristol Water has to identify and deliver biodiversity improvements is not being used to its full potential. Atkins recommends the company engages with the developer of the tool to obtain a reference manual to better understand how to extract the full potential from the tool. The Challenge Panel will monitor the company’s response to this recommendation during the coming year.

H4: Waste disposal compliance

Unit	Target 15/16	Actual 15/16	Target 16/17	Actual 16/17	Target 17/18	Target 18/19	Target 19/20
%	100	96	100	96	100	100	100

Definition of performance measure: The percentage compliance against environmental standards of waste disposed from the company's operational sites. A high percentage is good. The incentive associated with this measure is reputational.

Bristol Water achieved 96% compliance against the 2016/17 target of 100%. It reported a similar level of performance last year. The Challenge Panel has been informed that more than half the compliance failures it suffered were at Barrow TW. Bristol Water is looking into the reasons for these failures, which the Challenge Panel understands relate to difficulties in obtaining samples. The Challenge Panel notes that this caused performance to fall short of target last year. It will monitor performance during the coming year.

Atkins confirmed that the company's reporting methodology for this measure was updated during the year and is satisfactory. The resulting data is robust.

I1: Percentage of customers in water poverty

Unit	Target 15/16	Actual 15/16	Target 16/17	Actual 16/17	Target 17/18	Target 18/19	Target 19/20
%	2.0	0.37	2.0	0.94	1.9	1.9	1.8

Definition of performance measure: Bristol Water has defined water poverty as the percentage of households within its supply area for whom their water charges represent more than 2% of their disposable income, defined as gross income less income tax. A low number is good. The incentive relating to this commitment is reputational.

The reported percentage of customers in water poverty in 2016/17 was 0.94%, an increase over the figure of 0.37% reported last year. The target percentage for 2016/17 was 2% so the Challenge Panel is pleased to see performance is well within this.

When challenged by the Challenge Panel over the increase in customers in water poverty from last year, Bristol Water explained that this is a statistical issue and that source data on income come from a census-based model provided by an external provider. The increase is unlikely to be 'real' because of this. The company's focus is more on number of customers on social tariffs, rather than in water poverty as defined by this measure. The Challenge Panel notes that Bristol Water is using the number of customers on its Social Tariffs as a better indicator of its progress in providing help to customers in need.

Atkins has confirmed that the reported number comes from the third-party model

J1: Service Incentive Mechanism (SIM)

Unit	Target 15/16	Actual 15/16	Target 16/17	Actual 16/17	Target 17/18	Target 18/19	Target 19/20
ranking	Top 5	Top 5	Top 5	85.9 (Top 5)	Top 5	Top 5	Top 5

Definition of performance measure: The Ofwat comparative measure of customer service that includes the number of complaints and unwanted contacts received and the performance in handling telephone

contacts. It also includes a survey of customer's views on the service provided by the company. The result is the company's ranking in the industry. The incentive is financial (reward and penalty).

The Challenge Panel noted that the company's SIM performance improved over last year. Bristol Water is anticipating being in the industry top five for SIM again but it will have to wait for other companies' data to be published to confirm this.

J2: General satisfaction from surveys

Unit	Target 15/16	Actual 15/16	Target 16/17	Actual 16/17	Target 17/18	Target 18/19	Target 19/20
%	93	83	93	86	93	93	93

Definition of performance measure: The percentage of customers responding to the company's annual household customer tracking survey who rate their satisfaction in respect of the company's service as excellent, very good or good. A high percentage is good. The incentive is reputational.

Bristol Water achieved a 3% improvement in performance against this measure over last year. However the 86% satisfaction achieved fell short of the 2016/17 target of 93%. Whilst the company continues to implement a number of service improvement initiatives, it needs to further understand the reasons why a significant proportion of customers give it a service rating of 'neither good nor poor'. The Challenge Panel will monitor progress during the coming year.

Atkins confirmed that the reported data for his measure have come from the associated survey commissioned by a third-party provider.

J3: Value for money

Unit	Target 15/16	Actual 15/16	Target 16/17	Actual 16/17	Target 17/18	Target 18/19	Target 19/20
%	71	70*	71	72	71	72	72

Definition of performance measure: The percentage of customers who consider that the company provides good value for money. The measure is calculated from an independent survey of 200 customers each month who have had cause to contact Bristol Water on an operational issue. A high percentage is good. The associated incentive is reputational.

The Challenge Panel was informed that Bristol Water amended its reporting methodology for this measure during the year in response to Atkins' audit. This established that the value had previously been calculated as the mean average score of responses to the survey rather than using the definition used in setting the targets for this commitment at PR14 (which also includes all respondents to the survey, rather than just operational contacts).

The Challenge Panel welcomes the company's response to the audit findings and the improved comparability and consistency that results from the amended reporting methodology. It notes that Bristol Water has had to restate the performance it reported in 2015/16 from 78% to 70% as a result. The Challenge Panel understands that the company has informed Ofwat accordingly.

For 2016/17 Bristol Water reported a 72% performance for this measure against a target of 71%.

Atkins have confirmed the new reporting methodology and resulting data are robust.

K1: Ease of contact from surveys

Unit	Target 15/16	Actual 15/16	Target 16/17	Actual 16/17	Target 17/18	Target 18/19	Target 19/20
%	96.3	95.0*	96.4	94.4	96.5	>96.5	>96.5

Definition of performance measure: The percentage of consumers who consider that Bristol Water is easy to contact by telephone, based on responses to a monthly telephone survey. Thus a high percentage is good. The incentive is reputational.

The Challenge Panel was informed that Bristol Water amended its reporting methodology for this measure during the year in response to Atkins' audit findings. The reporting methodology now aligns with the assumptions used to define this measure at PR14. The Challenge Panel welcomes the company's response to the audit findings and the improved comparability and consistency that results from the amended reporting methodology. It notes that Bristol Water has had to restate the performance it reported in 2015/16 from 93% to 95% as a result. The Challenge Panel understands that the company has informed Ofwat accordingly.

For 2016/17 Bristol Water achieved a 94.4% performance for this measure against a target of 96.4%. The Challenge Panel notes that Bristol Water's efforts are aimed at why so many customers tick 'don't know' rather than providing a definitive answer.

Atkins have confirmed the new reporting methodology and resulting data are robust.

L1: Negative billing contacts

Unit	Target 15/16	Actual 15/16	Target 16/17	Actual 16/17	Target 17/18	Target 18/19	Target 19/20
contacts/year	2,480	2,301	2,395	3,096	2,315	2,240	2,170

Definition of performance measure: The number of 'unwanted' calls received by Bristol Water relating to specific billing related issues. The definition of unwanted calls is taken from the Ofwat definition used for the SIM. A low number is good. The incentive is reputational.

Bristol Water reported 3,096 negative billing contacts in 2016/17. This was significantly higher than in 2015/16 (2,301) and significantly above the target of 2,395 for 2016/17.

The Challenge Panel challenged the company over its performance and its plans to improve. It understands a coding issues identified by the company has resulted in additional contacts now being logged against this measure. The Challenge Panel welcomes the increased focus Bristol Water is giving to customer service and the initiatives such as proactive text messaging it has introduced. It will closely monitor the company's performance against this measure in the coming year.

Atkins has confirmed that both the company's reporting methodology and the resulting data for this measure are robust.