

AFW Delivering Outcomes for Customers

Evidence Document

March 2019



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1 High level response to Ofwat Feedback

1.1 Summary

In this summary, we present our Revised Plan and set out our response to Ofwat's IAP published in January 2019, in respect of the test area Delivering Outcomes for Customers. We have carefully listened to Ofwat's feedback and substantially improved our plan.

We have sharpened our focus. We commit to do more for less, by:

- making ourselves even more visibly accountable to the communities we serve by increasing the number of Performance Commitments (PCs) from 19 to 28, which provides more granular commitments as part of a well-rounded and balanced package of PCs;
- adding ambitious bespoke Performance Commitments (PCs) that are dedicated to: (a)
 the longer-term provision of resilience by addressing challenges in our service area (b)
 the sustainability of our asset health reflecting our unique challenges and (c)
 supporting customers in vulnerable circumstances, and those who will benefit from our
 Priority Services Register;
- stretching ourselves further through our PCs including leakage where we have increased our reduction target from 15% to 18.5% (equivalent to 30 Ml/d);
- Revising RoRE, using P10/P90, giving an increased range of +0.33% and -2.61%, which is in line with Ofwat guidance ensuring alignment of the interests of management and shareholders with customers, to deliver on our PCs to customers;
- using industry benchmark data on ODI rates for this Revised Plan while commissioning further research to support additional triangulation¹ and demonstrate customer support for outperformance payments; and
- continuing to anchor the Revised Plan in the revised draft Water Resources Management Plan (rdWRMP) submitted in March 2019 which has received strong external assurance and uses innovative industry leading adaptive planning techniques.

We accept the need to apply additional customer protections and we will apply outperformance payment sharing mechanisms in line with Ofwat's guidance. We have also applied additional protection by implementing caps on some individual PCs. Where appropriate we have applied underperformance collars to ensure the overall incentive package remains balanced and aligned to customer priorities.

All external assurance in this document is provided by Atkins in their assurance of App 1, accompanying commentary and underlying data table methodology procedures. We have strong independent assurance from our CCG in respect of those PCs that relate to PSR, Value for Money, Mean Zonal Compliance and the CCG has continued to review and challenge the basis of newly commissioned customer research.

¹ We have commissioned further willingness to pay research with our own customer base so we can develop final triangulated rates. As the additional research will not be available for 01 April 2019 we will provide further information to Ofwat by 24 May 2019 if the evidence from the additional research suggests a further refinement of our ODI incentive rates is necessary.



2 Detailed response to Ofwat feedback actions

2.1 AFW.OC.A1

2.1.1 Overview of test area action

Table 1: Action details for AFW.OC.A1

Action Ref.	Action
AFW.OC.A1	Appendix 2 of the PR19 methodology states "Companies must propose bespoke PCs to address their own particular resilience challenges." Therefore, the company should include resilience as part of its overall package of bespoke PCs.

Nature of adjustment: action completed

2.1.2 Our response

This response should be read in conjunction with our response to the test area for 'Securing Long-term Resilience' and in action AFW.LR.A1.

We have included additional bespoke resilience measures in our Revised Plan. The additional measures to address high impact low probability risks include:

- Unplanned interruptions to supply over 12 hours
- Cyber security & resilience

We have also included further measures to address business as usual risks:

- Properties experiencing longer or repeated instances of low pressure (non-DG2)
- BSI accreditation
- Strategic resource development

Our choice of additional bespoke measures to address high impact low probability risks is based on our assessment of the specific resilience challenges we face and considers the work originally undertaken by our CCG Resilience and Environment sub-groups (see appendix OC.A1.1). Despite seeing a significant improvement during 2018-19 in our existing measure of supply interruptions, which is based on the number of properties experiencing a supply interruption of more than 12 hours, our recent history during AMP6 has been very challenging. On this basis we felt strongly, supported by evidence from engaging with customers, that we should retain this measure as a resilience measure capturing the small number of incidents that can have a high impact on customers. This risk and a targeted programme of work around network calming and tackling 'hotspots' was included in our PR14 business plan and will continue into and beyond AMP7.

We have also chosen to introduce a bespoke resilience measure for cyber security and resilience given this is already a high priority issue within the business and has been an important area of focus during AMP6 to improve the underlying reliability and resilience services to employees and customers. We have adopted a key measure of service resilience,



that has been used internally for several years, as our PC. We know that cyber security and threats from computer hacking continues to increase at pace and that customers expect us to securely and confidentially manage all their personal data. The CCG sub working group formed in 2017 for "Resilience and the Environment" proposed an IT resilience bespoke PC due to the impact of IT failures and their implications for customers' ability to contact the Company. Papers from this meeting are included in appendix OC.A1.1. When this PC was tested with customers in March 2019 (appendix OC.A1.3) 79% of customers found this was very or fairly acceptable as a target.

In the time available to respond to the IAP publication we have also been mindful of the need to not only choose additional measures that address resilience challenges we face but measures for which we have well established, robust and accurate means of measurement that can be subjected to, and stand up to, independent external audit and review. We have commissioned additional willingness to pay research that we will consider, so we can understand how the additional measures proposed are supported by customers. Should the research suggest that our Revised Plan needs further refinement we will provide a supplementary submission to Ofwat alongside our remaining IAP actions on 24 May 2019.

We are proposing that both bespoke resilience measures are non-financial. On supply interruptions we are confident that should we fail to meet our PC target of 320 properties per annum (this is our AMP6 target that will be extended across AMP7) then this will manifest as ODI underperformance payments under the common PC measure of average minutes lost greater than 3 hours. The cyber security and resilience PC is non-financial reflecting that this is a new measure that will need some time to mature. We will look to consider how we could develop this further as part of our wider systems base review of resilience as set out in the test area document 'Securing Long-term Resilience' and in action AFW.LR.A2. It is also true that any cyber security and resilience underperformance has direct cost consequences for the business and in terms of customer facing impact would directly impact on customer experience assessed through the introduction of C-Mex.

The additional three measures are included to respond to specific Ofwat actions on BSI accreditation AFW.AV.A4, strategic resource development AFW.CE.A2 and low-pressure AFW.OC.A27 and so can be considered as measures to address challenges we face. Of these both BSI accreditation and low-pressure are non-financial. The former does not lend itself to financial incentives given that it is about inclusive service and the latter is a new measure that will need time to mature. During AMP7 the low-pressure measure will work in conjunction with financial incentives on a low-pressure PC based on the DG2 measure. The final strategic resource development measure will include financial incentives tied to the gated delivery of schemes. Presently the exact details of this ODI mechanism are still under development and will not be finalised for the 01 April Revised Plan submission. Further information is set out in the test area document 'Securing Cost Efficiency'.

This means that our overall approach and performance commitment framework for our Revised Plan includes an additional 5 bespoke measures:

- Properties experiencing longer or repeated instances of low pressure (non-DG2)
- Unplanned interruptions to supply over 12 hours
- BSI accreditation
- Cyber security & resilience
- Strategic resource development



For further details, please see App1 table commentary and:

- Line 10, App1 (Properties experiencing longer or repeated instances of low pressure (non-DG2))
- Line 20 App1 (Unplanned interruptions to supply over 12 hours)
- Line 23 App1 (BSI accreditation)
- Line 24 App1 (Strategic resource development)
- Line 25 App1 (Cyber security & resilience)

2.1.3 Implications across the plan

We have included additional bespoke resilience PCs that we will deliver in response to the IAP challenge. We have not included additional funding to deliver these commitments as we regard these as essential elements of providing a resilient base service. There is one exception.

We have included a PC and are developing an ODI type mechanism for strategic resource development in response to action AFW.CE.A2. This includes the additional funding that Ofwat has provided for six companies to develop strategic options ready for delivery as outlined above.

2.1.4 Assurance

Our final proposals, as set out in our Revised Plan, are detailed in data table App1 and the supporting commentary.

The data table and commentary have been assured by Atkins (appendix OC.A1.2) who were commissioned to undertake assurance of the non-financial data tables and commentaries together with the process used to set PCs and associated underperformance and outperformance payments for the ODIs. Atkins has undertaken a check on the data tables contained within their scope of work, to comment on whether they are:

- Reliable, accurate and complete (based on Atkins' review and given the uncertainties in the base data);
- Compliant with the data table guidance in terms of methodology (including cost allocations between drivers of price controls); and
- Supported by commentary that complies with Ofwat guidance and reconciles with the technical cases as audited.

Atkins assurance, as summarised above, applies to all the PC specific actions (AFW.OC.08 to AFW.OC.A49) set out in Table 2: PC specific actions (for each PC) on pages 6 to 38 of the IAP publication 'Affinity Water: Test area assessment'. Rather than repeat this response for each PC the remainder of this test area document will reference this response in section 2.1.4.



2.1.5 Evidence

Table 2: Evidence to support the response to AFW.OC.A1

Appendix	Description
OC.A1.1	PR19 resilience & environmental bespoke commitments working group minutes (Nov 17)
OC.A1.2	CCG update on bespoke commitments (13 Dec 17)
OC.A1.3	PR19 SteerCo: Bespoke Commitments Resilience Paper (Feb 18)
OC.A1.4	Atkins Technical Assurance Report March 2019
OC.A1.5	Verve customer research report March 2019
OC.A1.6	Cyber Security and Resilience PC Definition

2.2 AFW.OC.A2

2.2.1 Overview of test area action

Table 3: Action details for AFW.OC.A2

Action Ref.	Action
AFW.OC.A2	The company should consider the selection of further bespoke asset health measures that reflect the unique challenges faced by Affinity Water. This should include but not be limited to the two customer contacts measures from the asset health long list.
	Where the company proposes additional PCs it should provide evidence to support the selection of these PCs and customer engagement evidence to support any associated outperformance or underperformance payments.

Nature of adjustment: action completed

2.2.2 Our response

We have included two additional bespoke asset health measures both with financial incentives in our Revised Plan. They are:

- Customer contacts for discolouration
- Properties experiencing longer or repeated instances of low pressure (DG2)

Our choice of additional bespoke measures is based on our assessment of the unique challenges we face and considers Ofwat's requirement that we should include the customer contact measure from the asset health long list. In 2017, our CCG formed a sub working group



for "Resilience and Environment", with a focus to develop the bespoke AMP7 PCs. This group proposed a number of PCs, one of which included the DG2 measure. The minutes of the CCG sub working group are included in appendix OC.A1.1. Customer contacts for discolouration is taken from page 69 of the Asset Health long list (the second customer contact measure relates to wastewater companies and therefore not relevant to us2). Regardless of Ofwat's requirements we have been managing and reporting our performance against customer contacts for discolouration during AMP6 and so have robust, accurate and reliable performance data. During AMP7 we have a significant investment in a water condition plant at Sundon that is necessary to allow us to move large volumes of water south from Grafham reservoir into Welwyn. There is a risk that without the conditioning plant that customers will see an aesthetic deterioration in their tap water. Considering this risk, we think it appropriate to retain customer contacts for discolouration as PC for AMP7. We have also chosen to introduce the DG2 low-pressure measure as a bespoke asset health measure following Ofwat's challenge of our September Plan, further information set out in AFW.OC.A27. We know from our operational customer contact data that low-pressure continues to be an important issue for customers and our comparative performance needs to improve, even if directly comparable performance data across the industry is hard to come by.

We are proposing that both bespoke measures are financial. On customer contacts for discolouration we are setting a PC level of 0.30 contacts per 1,000 customers compared to 0.66 for AMP6 with an underperformance only incentive. For low pressure, we propose an improving target of 1.645 properties per 10,000 connections in 2020-21 to 1.18 in 2024-25. This is the equivalent of 250 properties by the end of 2020-21 improving to 180 properties by the end of 2024-25. This PC will have an underperformance and outperformance incentive.

In the time available to respond to the IAP publication we have also been mindful of the need to not only choose additional measures that address unique challenges we face but measures for which we have well established, robust and accurate means of measurement that can be subjected to, and stand up to, independent external audit and review. We have commissioned additional willingness to pay research that we will consider so we can understand how the additional measures proposed are supported by customers. Should the research suggest that our Revised Plan needs further refinement we will provide a supplementary submission to Ofwat alongside our remaining IAP actions on 24 May 2019.

This means that our overall approach and performance commitment framework for our Revised Plan includes 4 bespoke measures:

- Unplanned outage
- Number of burst mains
- Properties experiencing longer or repeated instances of low pressure (DG2)
- Customer contacts for discolouration

For further details, please see App1 table commentary and:

- Line 5, App1 (Unplanned outage)
- Line 6, App1 (Number of burst mains)
- Line 18, App1 (Properties experiencing longer or repeated instances of low pressure (DG2))
- Line 21 App1 (Customer contacts for discolouration)

² Ofwat, "Delivering Water 2020: consultation on PR19 methodology, Appendix 3: Outcomes technical definitions", 11 July 2017.



2.2.3 Implications across the plan

We have included additional bespoke asset health PCs that we will deliver in response to the IAP challenge. We have not included additional funding to deliver these commitments as we regard these as essential elements of providing a resilient base service.

2.2.4 Assurance

See section 2.1.4 above.

2.2.5 Evidence

Table 4: Evidence to support the response to AFW.OC.A2

Appendix	Description
OC.A1.1	PR19 resilience & environmental bespoke commitments working group minutes (Nov 17)
OC.A1.2	CCG update on bespoke commitments (13 Dec 17)
OC.A1.3	PR19 SteerCo: Bespoke Commitments Resilience Paper (Feb 18)
OC.A1.4	Atkins Technical Assurance Report March 2019
OC.A2.1	Ofwat, "Delivering Water 2020: consultation on PR19 methodology, Appendix 3: Outcomes technical definitions", 11 July 2017.

2.3 AFW.OC.A3

2.3.1 Overview of test area action

Table 5: Action details for AFW.OC.A3

Action Ref.	Action
AFW.OC.A3	The company should provide justification for discontinuing its PR14 Value for Money PC (R-A2: Value for money survey). If sufficient justification for discontinuing the PC cannot be provided, the company should continue its PR14 Value for Money PC.

Nature of adjustment: alternative approach

2.3.2 Our response

Our Revised Plan will be continuing with a Value for Money PC as a non-financial measure.

Following publication of the IAP, we have discussed this matter with the CCG and decided to continue to measure customer perception of the value for money of the services received from



us. However, during 2019-20 we will re-design the approach to discharging the commitment to ensure we are using a tool from April 2020 which is as useful as possible, as detailed below.

Currently, as per our PR14 commitment, we survey a random sample of customers that live in our catchment area, and ask about a number of measures that contribute to the "value for money index". We have learned during AMP6 that there are several constraints to using the current index: it is based on 11 different questions, which has made it difficult to analyse, requiring identification of the various measures and/or combinations which are driving changes in scores. We will not be continuing with our existing method of survey beyond March 2020.

Our ongoing objective, consistent with what we set out in our PR14 Business Plan, is that the value for money survey will enable us to understand whether our service meets customers' expectations, is affordable and provides value for money. We will be transparent and publish the findings of this survey which will be conducted at least annually. We will work with the CCG during the coming year to design and commission the successor to our present survey. The CCG will hold us to account for undertaking and using the results and findings of this new survey tool. We will also establish a new baseline measure in year one of the next price control period.

2.3.3 Implications across the plan

The implications for our Revised Plan from retaining this PC are minimal as we are seeking to retain a modified version of the survey tool that will continue to have non-financial incentives.

2.3.4 Assurance

Our approach is assured and endorsed by our CCG as set out in its report. Our CCG will provide assurance of our proposal to have developed a new survey tool from April 2020 and will assess and report progress as part of its published meeting minutes and annual report for 2019-20.

2.3.5 Evidence

Table 6: Evidence to support the response to AFW.OC.A3

Appendix	Description
OC.A1.1	PR19 resilience & environmental bespoke commitments working group minutes (Nov 17)
OC.A1.2	CCG update on bespoke commitments (13 Dec 17)
OC.A1.3	PR19 SteerCo: Bespoke Commitments Resilience Paper (Feb 18)
OC.A3.1	Supplementary report to Ofwat from the Affinity Water Customer Challenge Group (29 March 2019)



2.4 AFW.OC.A4

2.4.1 Overview of test area action

Table 7: Action details for AFW.OC.A4

Action Ref.	Action
AFW.OC.A4	The company should reconsider the ODI rates proposed and provide further evidence, either from its own customer base or wider industry studies, to demonstrate that the marginal benefit estimates used are reflective of its customers' preferences and valuations, or conduct further engagement to develop triangulated ODI rates that are based on a broader range of customer evidence.
	In cases of rejection or revisions to enhancement expenditure or a cost adjustment claim, the company should consider the implications, if any, for the associated level of the PC and ODI incentive rates proposed, and provide evidence to justify any changes to its business plan submission. In cases where a scheme will no longer be undertaken, the company should consider the removal of the associated scheme-specific PC.
	The company should provide further evidence to detail the estimation of forecast efficient marginal costs within its ODI rate calculations, in line with our PR19 Final Methodology. In particular, the company should provide evidence to demonstrate how these marginal cost estimates relate to the cost adjustment claims or enhancement expenditure proposed by the company.

Nature of adjustment: alternative approach

2.4.2 Our response

Summary

Our response and reconsideration of ODI rates falls into two parts given the time available to respond to the IAP publication and the lead time necessary to commission further research evidence.

Firstly, we will use the average industry outperformance and underperformance rates for all common PCs in our Revised Plan for 01 April 2019. This will ensure our ODI rates align with benchmark data published by Ofwat. Secondly, we have commissioned further willingness to pay research so we can develop triangulated rates based on our original submission, Ofwat benchmark data and our own customer preferences and valuation. The additional research will not be available for our Revised Plan submission on 01 April 2019 so we will provide further information to Ofwat by 24 May 2019 if the evidence from the additional research suggests a further refinement of our ODI incentive rates is necessary following final triangulation.

Revised Plan 01 April 2019

For our Revised Plan we have taken account of the benchmark data published by Ofwat and have set our outperformance and underperformance ODI rates using the mean rates from page 28, Ofwat, "Technical Appendix 1: Delivering Outcomes for Customers" January 2019



converted into £/ML/d. We have adopted this approach for all common PCs and our detailed proposals are set out in the specific PC and ODI related actions listed further in this document and included in data table App1 and its supporting commentary.

We recognise that using industry benchmark data changes our overall RoRE exposure and has a material impact of some individual PCs. For example, supply interruption underperformance rates more than double from £322.7k to £739.2k whereas PCC underperformance rates fall from £490.2k to £288.6k. Because of this variation we have decided to use the benchmark data consistently for all common PCs rather than selecting benchmark data for some common PCs.

Final ODI triangulation 24 May 2019

When putting together our ODI rates, for the estimation of marginal benefits in our September Plan, we made use of all the industry willingness to pay rate metadata that was available to us. Our approach included data points across multiple willingness to pay surveys carried out across the industry for PR19 and PR14 as well as surveys we have carried out ourselves for the past two price reviews with customers. We developed a benefit transfer database to ensure that our evidence was broader and more robust than relying on a single stated preference research survey, in effect allowing us to develop triangulated rates. Despite considering wider industry studies our approach resulted in ODI rates outside the industry benchmark data range published by Ofwat in its Technical Appendix 1.

We have commissioned further willingness to pay research with our own customer base so we can develop final triangulated rates. These final rates will be triangulated from our September Plan (wider industry studies), Ofwat benchmark data used for our 01 April 2019 Revised Plan and our own customer preferences and valuation from the newly commissioned work. As the additional research will not be available for 01 April 2019 we will provide further information to Ofwat by 24 May 2019 if the evidence from the additional research suggests a further refinement of our ODI incentive rates is necessary following final triangulation.

Revisions to enhancement expenditure or a cost adjustment claim

In the test area evidence document 'Securing Cost Efficiency' AFW.CE.A1 we set out our response to Ofwat's view of efficient costs for our Revised Plan. We explain our assessment of an efficient level of Base Totex (Botex), our decision with respect to cost adjustment claims and our proposed revisions to enhancement expenditure. Given our decision to use the average industry outperformance and underperformance rates for all common PCs, we will not need to make any changes to our Revised Plan³.

We confirm that there are no instances where a scheme will no longer be undertaken and so the removal of an associated scheme-specific PC is required.

In line with the PR19 Final Methodology we have provided evidence to detail the estimation of forecast efficient marginal costs for bespoke financial PCs within our ODI rate calculations in the supporting commentary to data table App1. The evidence demonstrates how our marginal cost estimates relate to our enhancement expenditure proposals.

This generic action around consideration of ODI rates is repeated for most of the PC specific actions (AFW.OC.08 to AFW.OC.A49) set out in Table 2: PC specific actions (for each PC) on

-

³ We will evaluate our proposed incentive rates in line with this action point if a further refinement of ODI incentive rates away from the Ofwat benchmark data is necessary on 24 May 2019.



pages 6 to 38 of the IAP publication 'Affinity Water: Test area assessment'. Rather than repeat this response for each PC the remainder of this test area document will reference this response in section 2.4.2.

2.4.3 Implications across the plan

The implications for our Revised Plan are significant in reshaping and rebalancing the overall PC and ODI package. For some PCs the ODIs carry much more weight whereas others less weight. For example, moving to the industry mean ODI rate for supply interruptions increases the financial risk associated with underperformance from £322.7k to £739.2k per minute (average minutes above 3 hours). The same is true of the CRI index where moving to the industry mean ODI rate for underperformance increases financial risk associated with underperformance from £483.1k to £846.6k per minute. For some PCs the opposite is true. For leakage and PCC, we generally see a reduction in financial risk by moving to the industry mean ODI rates.

We have had to carefully consider the changing ODI rates in conjunction with the underlying PC target, especially where this has become more challenging, in deciding whether to retain or amend any deadbands or underperformance collars included in our September Plan. Decisions in respect of these issues are detailed in the following action responses on each individual PCs in this test area document. The overall impact of the PC and ODI package, in terms of incentives, is discussed in response to AFW.OC.A5.

2.4.4 Assurance

See section 2.1.4 above.

2.4.5 Evidence

Table 8: Evidence to support the response to AFW.OC.A4

Appendix	Description
OC.A4.1	Ofwat, "Technical Appendix 1: Delivering Outcomes for Customers" January 2019, page 28.

2.5 AFW.OC.A5

2.5.1 Overview of test area action

Table 9: Action details for AFW.OC.A5

Action Ref.	Action
AFW.OC.A5	The company should provide further explanation of how its ODI package incentivises it, through better aligning the interests of management and shareholders with customers, to deliver on its PCs to customers or it should revise its package to do so.
	The company should provide further evidence, such as its initial engagement and acceptability research, to confirm that the package is aligned with both customer and company priorities or it should revise its package to do so.

Nature of adjustment: action completed



2.5.2 Our response

Revised ODI package with improved incentives

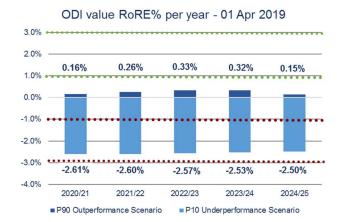
In response to this action we have reassessed the overall ODI package considering our response to actions AFW.OC.A1, AFW.OC.A2 and AFW.OC.A4 which has resulted in our Revised Plan having additional financial incentives as well as a significant reshaping and rebalancing of the overall PC and ODI package. Further, we have developed our overall approach to assessing our projected performance to ensure our ODI package gives sufficient risk exposure and incentives for management and shareholders to deliver on our PCs for customers.

In our September Plan, we took a rudimentary approach to the assessment of projected performance and used a combination of P25/75 'probable' outcomes for our RoRE analysis rather than a P10/P90 'possible' outcome. At the time of our September Plan we had not developed a comprehensive set of P10/P90 performance scenarios. By using the P25/75 'probable' outcomes as a proxy for a set of P10/90 performance scenarios we underestimated the risk exposure our PC and ODI framework. In fact, our business plan approach resulted in a RoRE range between +0.16% and -1.31% based on an average RCV of £1.14bn (as per our 2017-18 Annual Report and Accounts). Our original proposals therefore appeared risk adverse and did not demonstrate alignment between the interests of management and shareholders with customers.

For this Revised Plan we have developed our approach to the assessment of projected performance considerably. We have based our approach on a more detailed analysis of recent historic performance coupled with an improved assessment of the correlation between several PCs. The outcome of the work we have done is to produce a full set of P10/P90 performance scenarios that genuinely reflect the range of anticipated performance consistent with 80% of expected outcomes. The overall consequence of our revised approach is illustrated in Figure 1 below. The risk exposure now results in a RoRE range between +0.33% and -2.61%, the equivalent of +£1.89m to -£15.14m in an individual year, around double the values included in our September Plan. We think this provides much stronger incentives to align interests of management and shareholders with customers and to ensure the company delivers on its PCs. This analysis has been used as a direct input to our RoRE analysis and data table App26 as set out in the data table commentary.

ODI value £m per year - 01 Apr 2019 £5 £1.89 £0.94 £1.51 £1.87 £0.86 £0 -£5 -£10 -£15 -£15.14 -£14.70 £15.05 -£14.47 £14.87 -£20 2020/21 2021/22 2022/23 2023/24 2024/25 ■ P90 Outperformance Scenario ■ P10 Underperformance Scenario

Figure 1: AFW Revised Plan ODI package





ODI package aligned with customer and company priorities

Even though we have made several improvements and revisions to the incentives in our Revised Plan ODI package, as described above, it continues to be aligned with customer and company priorities. We know from our six-phased customer engagement programme, as detailed in 'Chapter 3 Listening to Customers and Stakeholders' and supporting Appendices that customers continue to prioritise 5 issues:

- high quality water (CRI)
- want us to play our part in saving water want leakage minimised (Leakage)
- want to play their part in saving water and the environment (PCC)
- expect good water pressure (Low Pressure DG2)
- want to experience an uninterrupted supply and want proactive, accurate and speedy responses to interruptions (Supply Interruptions).

These customer priorities are the most important company priorities and our PC and ODI package reflects this as illustrated in Figure 2 below. In the P90/P10 performance scenario these 5 issues account for around 90 per cent of the total underperformance incentives. This reinforces the alignment of interests of management and shareholders with customers, to deliver on its PCs to customers. We do not propose any further revisions for our Revised Plan.

We have commissioned further willingness to pay research with our own customer base so we can develop final triangulated rates, discussed earlier. This research is also enabling us to test further customer priorities. As the additional research will not be available for 01 April 2019 we will provide further information to Ofwat by 24 May 2019 if the evidence from the additional research suggests a further refinement of the alignment of our ODI package is necessary.

2.5.3 Implications across the plan

As outlined in response to AFW.OC.A4 the implications for our Revised Plan come from the reshaping and rebalancing of the overall PC and ODI package. We have had to carefully consider whether to retain or amend any deadbands, underperformance collars or outperformance caps included in our September Plan. Further information is included in our response to AFW.OC.A7.

Figure 2: AFW Revised Plan ODI package per PC for AMP7



2.5.4 Assurance

See section 2.1.4 above.

2.5.5 Evidence

Table 10: Evidence to support the response to AFW.OC.A5

Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019

2.6 AFW.OC.A6

2.6.1 Overview of test area action

Table 11: Action details for AFW.OC.A6

Action Ref.	Action
AFW.OC.A6	The company should increase its asset health underperformance payments in order to protect customers from poor performance or provide convincing evidence to demonstrate that its current proposals are in the interests of its customers (over the long and short term).
	The company should provide sufficient evidence that its customers support its proposed asset health outperformance payments. If it cannot do this, the company should remove the outperformance payments.
	The company should provide a clear list of what it considers to be its asset health PCs, and state its P10 underperformance payments and P90 outperformance payments for each of its asset health ODIs in £m and as a percentage of RoRE. In general underperformance payments should be higher than outperformance payments.

Nature of adjustment: action completed

2.6.2 Our response

We have increased our asset health underperformance payments from £1.1m on average per year to £3.7m per year to protect customers from poor performance and so have not provided additional evidence to demonstrate our original proposals are in the interests of customers.

Our asset health PCs, following our response to AFW.OC.A3, includes 4 bespoke measures:

- Number of burst mains (underperformance only)
- Unplanned outage (underperformance only)
- Properties experiencing longer or repeated instances of low pressure (DG2) (underperformance and outperformance)
- Customer contacts for discolouration (underperformance only)

All four measures have financial incentives but only low pressure (DG2) has the potential for outperformance payments. For this PC we have proposed a target of 1.645 properties per



10,000 connections in 2020-21 improving to 1.18 in 2024-25. This is the equivalent of 250 properties by the end of 2020-21 improving to 180 properties by the end of 2024-25.

We know from our six-phased customer engagement programme, as detailed in 'Chapter 3 Listening to Customers and Stakeholders' and supporting appendices that customers continue to prioritise five issues including an expectation of good water pressure (Low Pressure DG2). We have commissioned further willingness to pay research with our own customer base so we can develop final triangulated rates. This research is also enabling us to test further customer priorities and customer support for outperformance payments for tackling properties experiencing low pressure. Should this additional research clearly show a lack of customer support for low-pressure outperformance payments we will reconsider our approach as part of our update on 24 May 2019.

For the common asset health PCs listed above we will use the average industry outperformance and underperformance rates from Ofwat, "Technical Appendix 1: Delivering Outcomes for Customers" January 2019, as detailed in our response to AFW.OC.A4. This results in higher underperformance payments for mains bursts partially offset by lower underperformance payments for unplanned outage but we also have additional incentive payments from the addition of low-pressure (DG2) and customer contacts for discolouration.

P10/P90 incentive payments for asset health ODIs (£m and RoRE%)

Figure 3 below provides a summary of the P10 underperformance and P90 outperformance payments for each of our asset health ODIs (£m) for our Revised Plan on 01 April 2019 compared to our September Plan. The overall asset health incentive payments in our Revised Plan total £0m outperformance and £18.63m underperformance across AMP7. On average per year this equals 0.0% outperformance and -0.64% underperformance in RoRE terms.

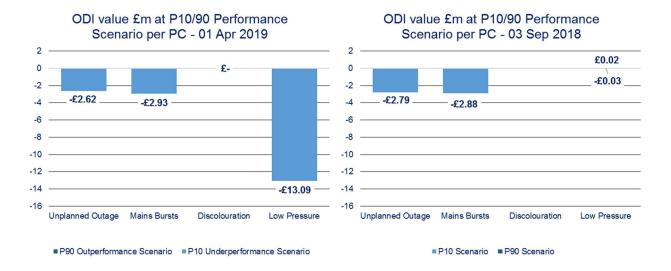


Figure 3: AFW Revised Plan ODI package per PC for AMP7

Direct comparison between the two plans is difficult given there are number of underlying changes in approach including:

Customer contact for discolouration was not included in the September Plan



- Unplanned outage and mains bursts incentive rates changed in line with our decision to use the average industry underperformance rates from Ofwat, "Technical Appendix 1: Delivering Outcomes for Customers" January 2019, as detailed in our response to AFW.OC.A4
- We have developed our approach to the assessment of projected performance considerably as explained in AFW.OC.A4
- Low-pressure PC has changed significantly between plans (see below)

As set out AFW.OC.A1 and AFW.OC.A2 we have changed substantially our approach to low-pressure. In our September Plan we had financial incentives tied to a measure of low-pressure that reflected duration of incidents. In our Revised Plan, in response to Ofwat's IAP challenge, we have adopted the DG2 measure of low-pressure and applied financial incentives to this measure and retained our previous non-DG2 measure as a reputational resilience measure.

In our P10 underperformance scenario we have assumed that we run into unforeseen challenges to address additional properties we anticipate will be added to our DG2 low pressure property register. We anticipate additional properties will be added over the next two years following the successful deployment of new loggers across our distribution network. We have increased loggers from 300 to more than 1,000. Only from 01 April 2019, (with the very recent version of the Waternet software) will we be able to start properly analysing the new loggers and their daily data. Once reporting accuracy has been assured we will make provision to add any additional properties impacted by low pressure to the DG2 register.

We understand this measure is entirely within in our control and we fully expect by the end of 2020-21 to have reduced the property count to less than 250 which we are confident we can achieve. Nevertheless, our P10 scenario assumes this is not achieved and we have proposed a collar in line with our P10 performance so that the overall balance of underperformance incentives is spread across several PCs that matter most to customers.

We confirm our underperformance payments will be higher than outperformance payments. In our Revised Plan, even at P90 we do not project any outperformance payments.

2.6.3 Implications across the plan

We now have four Asset Health ODIs in total. For further details, please see App1 table commentary and:

- Line 5, App1 (Unplanned outage);
- Line 6, App1 (Number of burst mains);
- Line 18, App1 (Properties experiencing longer or repeated instances of low pressure (DG2));
- Line 21 App1 (Customer contacts for discolouration)

2.6.4 Assurance

See section 2.1.4 above.

2.6.5 Evidence

Table 12: Evidence to support the response to AFW.OC.A6



Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019

2.7 AFW.OC.A7

2.7.1 Overview of test area action

Table 13: Action details for AFW.OC.A7

Action Ref.	Action
AFW1.OC.A7	The company should apply additional protections through an appropriate outperformance payment sharing mechanism and by implementing caps on individual PCs which could result in material outperformance payments. The payment sharing mechanism and caps to material ODIs should be applied in accordance with guidance provided in the 'Technical Appendix 1: Delivering Outcomes for Customers'

Nature of adjustment: action completed

2.7.2 Our response

We accept the need to apply additional customer protections and we will apply outperformance payment sharing mechanisms in line with guidance provide in 'Technical Appendix 1: Delivering Outcomes for Customers'. The effect of the sharing mechanism means we will share with customers, through in period revenue reductions (bill reductions), 50% of our incremental outperformance payments, once the total net outperformance payments in any year exceed more than 3% of our water RoRE for that year (excluding any PCs at the retail price control level, including C-Mex and D-Mex).

We have also applied additional protection by implementing caps on individual PCs. While we don't anticipate material outperformance payments, as per our P90 outperformance scenario described in AFW.OC.A5, we have nevertheless introduced caps for the following PCs:

- Leakage: we have set an outperformance payment cap just above our P90 performance, effectively capping any outperformance should we, in the unlikely event, do better than our projected P90 scenario. The cap is set at 0.5 ML/d better than the P90.
- Per capita consumption: we have set an outperformance payment cap just above our P90 performance, effectively capping any outperformance should we, in the unlikely event, do better than our projected P90 scenario. The cap is set at 1 l/h/d better than P90.
- River restoration: we have set an outperformance payment cap at 4 project schemes beyond the (cumulative) PC target.

Further detail on our proposals is set out in the respective detailed actions per PC in the remainder of this test area document.

2.7.3 Implications across the plan



Given our P90 outperformance scenario and implementation of outperformance caps we do not anticipate any material implications for our Revised Plan.

2.7.4 Assurance

See section 2.1.4 above.

2.7.5 Evidence

Table 14: Evidence to support the response to AFW.OC.A7

Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019

2.8 AFW.OC.A8

2.8.1 Overview of test area action

Table 15: Action details for AFW.OC.A8

Action Ref.	Action
AFW.OC.A8	Supply interruptions greater than 3 hours: For this common PC we expect all companies' service levels to reflect the values we have calculated for each year of the 2020 to 2025 period.

Nature of adjustment: action completed

2.8.2 Our response

Our September Plan matched Ofwat's end-of-AMP7 target of 00:03:00. We have now updated our AMP7 targets to meet Ofwat's expectations for the start of AMP7. We confirm the following levels:

- 2020-21 = 00:04:17
- 2021-22 = 00:03:58
- 2022-23 = 00:03:40
- 2023-24 = 00:03:22
- 2024-25 = 00:03:00

Please see Line 1, App1, Columns AQ:AU, and see data table commentary.

2.8.3 Implications across the plan

This is a minor change with no major implications.

2.8.4 Assurance

See section 2.1.4 above.

2.8.5 Evidence

Table 16: Evidence to support the response to AFW.OC.A8



Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019

2.9 AFW.OC.A9

2.9.1 Overview of test area action

Table 17: Action details for AFW.OC.A9

Action Ref.	Action
AFW.OC.A9	Supply interruptions greater than 3 hours: The company should explain why its proposed rates differ from our assessment of the reasonable range around the industry average (as set out in 'Technical Appendix 1: Delivering Outcomes for Customers') and demonstrate that this variation is consistent with customers' underlying preferences and priorities for service improvements in supply interruptions
	The company should also provide the additional information set out in 'Technical Appendix 1: Delivering Outcomes for Customers' to allow us to better understand the causes of variation in ODI rates for supply interruptions and assess the appropriateness of the company's customer valuation evidence supporting its ODI.

Nature of adjustment: action completed

2.9.2 Our response

As set out in section 2.4.2 earlier, we will use the average industry outperformance and underperformance rates for all common PCs in our Revised Plan for 01 April 2019. This will ensure our ODI rates align with benchmark data published by Ofwat.

We have also commissioned further willingness to pay research so we can develop triangulated rates based on our September Plan, Ofwat benchmark data and our own customer preferences and valuation. The additional research will not be available for our Revised Plan submission on 01 April 2019 so we will provide further information to Ofwat by 24 May 2019 if the evidence from the additional research suggests a further refinement of our ODI incentive rates is necessary following final triangulation. This will include addressing the additional information set out in 'Technical Appendix 1: Delivering Outcomes for Customers'.

For further details, please see App1 table commentary and App1, Line 1.

2.9.3 Implications across the plan

This higher ODI rates will give stronger incentives to avoid interruptions, mitigate them with alternative supplies and detect them more quickly. These factors will tend to improve customer service.

2.9.4 Assurance

See section 2.1.4 above.



2.9.5 Evidence

Table 18: Evidence to support the response to AFW.OC.A9

Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019

2.10 AFW.OC.A10

2.10.1 Overview of test area action

Table 19: Action details for AFW.OC.A10

Action Ref.	Action
AFW.OC.A5	Supply interruptions greater than 3 hours: The company should remove the proposed outperformance deadband and propose appropriate incentives that are supported by its customers.
	The company should reconsider whether to apply an underperformance collar to this PC, taking account of its broader approach to customer protection.
	If the company decides to retain the deadband or the collar, it should provide a convincing ODI-specific justifications for these decisions.

Nature of adjustment: alternative approach

2.10.2 Our response

Deadband

This response should be read in conjunction with our response to AFW.OC.A7 and our general approach to customer protection. Our Revised Plan retains a small deadband. The deadband is worth 43 seconds in 2020-21, 32 seconds in 2021-22, 20 seconds in 2022-23, 8 seconds in 2023-24. Our September Plan included a target of 3:00 minutes for 2024-25 so the deadband we have retained only applies for the first four years of AMP7.

We have retained the deadband to partially mitigate the additional risk from the transition in measure, from number of properties impacted for greater than 12 hours to average minutes interrupted greater than 3 hours. Unlike all other companies, our base funding and effort if AMP6 has been focussed on achieving a different measure to the rest of the industry. We anticipate, that despite our efforts, we could find the move to the new measure challenging and so seek some mitigation that reduces over time as we become familiar with operating and measuring performance against the common PC definition.

Underperformance collar

We have amended our underperformance collar in our Revised Plan but not removed it. Given the underlying increase in incentive rates (AFW.OC.A4) any operational underperformance now carries more financial risk. Our proposal is to set the penalty collar at the equivalent of 5 minutes above the UQ proposed PC level. This makes the maximum financial exposure equivalent to £3.7m p.a. more than double the September Plan. However, this financial exposure is somewhat mitigated by the deadband outlined above. Additionally, poor



performance in respect of supply interruptions, continues to fall under Guaranteed Standards of Service (GSS) meaning customers directly impacted by a supply interruption will continue to be eligible for compensation.

The way that we have now applied the collar is compliant with page 22 of IAP Technical Appendix 1: Delivering Outcomes for Customers, as the underperformance payment collar is set at a level where underperformance payments would comfortably exceed the 10% threshold if the collar was not in place.

2.10.3 Implications across the plan

The ODI rates, even with the small deadband and outperformance collar still give strong incentives to avoid interruptions, mitigate them with alternative supplies and detect them more quickly. These factors will tend to improve customer service.

2.10.4 Assurance

See section 2.1.4 above.

2.10.5 Evidence

Table 20: Evidence to support the response to AFW.OC.A10

Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019
OC.A4.1	Ofwat, "Technical Appendix 1: Delivering Outcomes for Customers" January 2019, page 31.

2.11 AFW.OC.A11

2.11.1 Overview of test area action

Table 21: Action details for AFW.OC.A11

Action Ref.	Action
AFW.OC.A11	Leakage: The company should reconsider its proposed service levels and ensure that they are stretching and meet the upper quartile values or provide compelling evidence to demonstrate why this level cannot be achieved. Based on the forecast data provided by companies in the September 2018 business plan submission the upper quartile values are 75 litres/property/day and 5.42 m3/km of mains/day. The company should clearly set out the evidence and rationale for the revised targets.

Nature of adjustment: action completed

2.11.2 Our response

We have carefully reconsidered, with our Board, our proposed service levels to ensure they are stretching and move us towards upper quartile values. We are now targeting an 18.5% reduction (in absolute terms) over AMP7 from 162.2 MI/d in 2019-20 to 132.2 MI/d in 2024-



45. Taking account of the move to the common measure results in a three-year average in 2024-25 of 138.2 Ml/d.

For further details, please see App1 table commentary and App1, Line 1.

As set out in AFW.CE.A1, a fundamental part of our plan is to respond to the short and long-term challenges that we face in drought resilience and sustainability of water resources for our region through a long-term plan for demand management and supply investment. This is particularly relevant to our company as we operate in a water-stressed area.

Our customers have responded to our earlier dWRMP and business plan consultations and engagement with their preference for increased ambition in AMP7 for reductions in leakage whilst protecting the environment. From Ofwat's and government's directions it is also clear that leakage needs to continue to fall, especially in water stressed regions such as ours. We therefore plan to deliver a higher reduction of leakage of 18.5% in 2020-2025 period, through increasing the intensity of our leakage activities, innovation and efficiency. In the long term, we aim to achieve 50% leakage reduction from its 2015 level by 2045. We will continue to develop our enhanced information to improve awareness and integration of our network responses. Accordingly, delivering leakage reduction improvements will also provide wider benefits for our customers as an integral component of an ambitious long-term demand reduction strategy.

Our leakage plan is an integrated and efficient component part of our wider long-term efficient approach to securing supply-demand balance at least cost in the face of increased water stress, along with a range of other benefits including enhanced resilience in both AMP7 and the long term. Our Revised Plan is fully aligned to the revised draft Water Resources Management Plan (dWRMP) in considering this reduction as a key component of demand management, alongside the regional options for supply- investment being explored in collaboration with other companies under the funding and framework established by Ofwat in the IAP. We have worked with other companies in setting out the case for funding such leakage reductions as enhancements (see appendix OC.A11.2) and we have based our own specific PC and ODI proposals on this approach.

2.11.3 Implications across the plan

The implication of our revised leakage reduction PC target is twofold: firstly, we are continuing to make the case that leakage reduction costs are enhancements and we are seeking additional costs, as set out in AFW.CE.A1, for the additional 3.5% leakage reduction included in our Revised Plan.

2.11.4 Assurance

See section 2.1.4 above.

2.11.5 Evidence

Table 22: Evidence to support the response to AFW.OC.A11

Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019



OC.A11.1	rdWRMP Atkins report
OC.A11.2	NERA Economic Consulting - Assessing Ofwat's Funding and Incentive Targets for Leakage Reduction

2.12 AFW.OC.A12

2.12.1 Overview of test area action

Table 23: Action details for AFW.OC.A12

Action Ref.	Action
AFW.OC.A12	Leakage: The company should provide further evidence to justify the use of an outperformance payment for this PC, including evidence of customer support.

Nature of adjustment: action completed

2.12.2 Our response

In our September Plan we provided evidence gathered through our six-phased customer engagement programme, as detailed in 'Chapter 3 Listening to Customers and Stakeholders' and supporting appendices that customers continue to prioritise 5 issues including that they want us to play our part in saving water and want leakage minimised. Across multiple pieces of research, we had consistent messages customers strongly back continuing to find ways to reduce leakage (71%) and leakage reduction proposals were supported by most customers (89%). Recently commissioned research shows that when looking at are leakage commitments, nearly half (48%) are willing to pay 68p more if we exceed our targets

We have also commissioned further willingness to pay research so we can develop triangulated rates based on our September submission. We will use this research to test further customer support for the use of outperformance payments. The additional research will not be available for our Revised Plan submission on 01 April 2019 so we will provide further information to Ofwat by 24 May 2019 giving evidence of customer support for outperformance payments for this PC.

2.12.3 Implications across the plan

The implication of our response on this action is not material to our Revised Plan.

2.12.4 Assurance

See section 2.1.4 above.

2.12.5 Evidence

Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019



OC.A1.5	Verve Customer Research Report March 2019
OC.A12.1	Leakage customer engagement evidence

2.13 AFW.OC.A13

2.13.1 Overview of test area action

Table 24: Action details for AFW.OC.A13

Action Ref.	Action
AFW.OC.A13	Leakage: The company should explain why its proposed rates differ from our assessment of the reasonable range around the industry average (as set out in 'Technical Appendix 1: Delivering Outcomes for Customers') and demonstrate that this variation is consistent with customers' underlying preferences and priorities for service improvements in leakage The company should also provide the additional information set out in 'Technical Appendix 1: Delivering Outcomes for Customers' to allow us to better understand the causes of variation in ODI rates for leakage and assess the appropriateness of the company's customer valuation evidence supporting its ODI.

Nature of adjustment: action completed

2.13.2 Our response

As set out in section 2.4.2 earlier, we will use the average industry outperformance and underperformance rates for all common PCs in our Revised Plan for 01 April 2019. This will ensure our ODI rates align with benchmark data published by Ofwat.

We have also commissioned further willingness to pay research so we can develop triangulated rates based on our September Plan, Ofwat benchmark data and our own customer preferences and valuation. The additional research will not be available for our Revised Plan submission on 01 April 2019 so we will provide further information to Ofwat by 24 May 2019 if the evidence from the additional research suggests a further refinement of our ODI incentive rates is necessary following final triangulation. This will include addressing the additional information set out in 'Technical Appendix 1: Delivering Outcomes for Customers'.

For further details, please see App1 table commentary and App1, Line 2.

2.13.3 Implications across the plan

This lower ODI rates will give slightly weaker incentives but combined with the improved underlying PC target moving from 15% to 18.5% the overall impact is broadly consistent with our September Plan.



2.13.4 Assurance

See section 2.1.4 above.

2.13.5 Evidence

Table 25: Evidence to support the response to AFW.OC.A13

Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019
OC.A4.1	Ofwat, "Technical Appendix 1: Delivering Outcomes for Customers" January 2019, page 28.

2.14 AFW.OC.A14

2.14.1 Overview of test area action

Table 26: Action details for AFW.OC.A14

Action Ref.	Action
AFW.OC.A14	Leakage: The company should provide further ODI-specific evidence to support its use of a cap and a collar, whilst also considering how its use of these features aligns with its broader approach to customer protection.
	The company's evidence should include justification for the levels at which the cap and collar are set, with the company explaining why these levels are appropriate and in customers' interests. The company should consider a more appropriate balance of risk by amending the cap and collar.

Nature of adjustment: alternative approach

2.14.2 Our response

This response should be read in conjunction with our response to AFW.OC.A7 and our general approach to customer protection. We have amended the underperformance collar in our Revised Plan but not removed it. Our proposal is to set the underperformance collar symmetrically in line with the outperformance cap i.e. both the collar and cap set to apply 0.5 Ml/d beyond P10 and P90 performance forecasts so there is a more appropriate balance of risk.

The way that we have now applied the collar is compliant with page 22 of IAP Technical Appendix 1: Delivering Outcomes for Customers, as the underperformance payment collar is set at a level where underperformance payments would exceed the 10% threshold if the collar was not in place.

We think that this draws an appropriate balance between the customer and company interest with strong incentives for delivery.



2.14.3 Implications across the plan

The implication of our response on this action is not material to our Revised Plan as the cap and collar have been set beyond the P10/P90 performance scenarios.

2.14.4 Assurance

See section 2.1.4 above.

2.14.5 Evidence

Table 27: Evidence to support the response to AFW.OC.A14

Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019
OC.A4.1	Ofwat, "Technical Appendix 1: Delivering Outcomes for Customers" January 2019, page 10.

2.15 AFW.OC.A15

2.15.1 Overview of test area action

Table 28: Action details for AFW.OC.A15

Action Ref.	Action
AFW.OC.A15	Per capita consumption: The company should explain why its proposed rates differ from our assessment of the reasonable range around the industry average (as set out in 'Technical Appendix 1: Delivering Outcomes for Customers') and demonstrate that this variation is consistent with customers' underlying preferences and priorities for service improvements in per capita consumption.
	The company should also provide the additional information set out in 'Technical Appendix 1: Delivering Outcomes for Customers' to allow us to better understand the causes of variation in ODI rates for per capita consumption and assess the appropriateness of the company's customer valuation evidence supporting its ODI.

Nature of adjustment: action completed

2.15.2 Our response

As set out in section 2.4.2 earlier, we will use the average industry outperformance and underperformance rates for all common PCs in our Revised Plan for 01 April 2019. This will ensure our ODI rates align with benchmark data published by Ofwat.

We have also commissioned further willingness to pay research so we can develop triangulated rates based on our September Plan, Ofwat benchmark data and our own customer preferences and valuation. The additional research will not be available for our Revised Plan submission on 01 April 2019 so we will provide further information to Ofwat by



24 May 2019 if the evidence from the additional research suggests a further refinement of our ODI incentive rates is necessary following final triangulation. This will include addressing the additional information set out in 'Technical Appendix 1: Delivering Outcomes for Customers'.

For further details, please see App1 table commentary and App1, Line 3.

2.15.3 Implications across the plan

This lower ODI rates will give slightly weaker incentives overall but the overall impact is broadly consistent with our September Plan.

2.15.4 Assurance

See section 2.1.4 above.

2.15.5 Evidence

Table 29: Evidence to support the response to AFW.OC.A15

Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019
OC.A4.1	Ofwat, "Technical Appendix 1: Delivering Outcomes for Customers" January 2019, page 10.

2.16 AFW.OC.A16

2.16.1 Overview of test area action

Table 30: Action details for AFW.OC.A16

Action Ref.	Action
AFW.OC.A16	Gaps & Voids: The company should revise its target to include reductions in the first year of the plan and to target more stretching reductions. It should clearly set out the evidence and rationale for the revised target or if it retains the original targets it should set out why this is in the customers interests.

Nature of adjustment: action completed

2.16.2 Our response

We understand that this action point refers to voids rather than gaps and voids. We are targeting an upper quartile performance in 2024-25 based on an assessment of all companies' PR19 September Plans. We have revised our target to include reductions in the first year of Revised Plan and we will target a more stretching reduction to achieve a level of voids at 2.1% by 2024-25 opposed to a level of voids at 2.3%, that was included in our September Plan.

Please see Line 14, App1, Columns AQ:AU, and App1 table and supporting commentary.



2.16.3 Implications across the plan

Our Revised Plan proposals will move us to an industry upper quartile performance level by 2024-25 with improvement beginning in the first year of AMP7, in 2020-21. In broad terms the implication across the plan will be minimal.

2.16.4 Assurance

See section 2.1.4 above.

2.16.5 Evidence

Table 31: Evidence to support the response to AFW.OC.A16

Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019

2.17 AFW.OC.A17

2.17.1 Overview of test area action

Table 32: Action details for AFW.OC.A17

Action Ref.	Action
AFW.OC.A17	Gaps & Voids: The company should provide evidence to demonstrate that an outperformance payment would benefit customers and that it is designed in such a way that does not create perverse incentives with respect to the timely and accurate registration of void sites.

Nature of adjustment: action completed

2.17.2 Our response

We understand that this action point refers to voids rather than gaps and voids. Our improvement in performance will be beneficial to customers as lower levels of false voids will reduce the scale of cross-subsidy effectively paid by existing customers. The impact will be lower bills for customers.

The incentive is designed to ensure that the benefit to customers of the company identifying a void is greater than the value of outperformance incentive. We have valued the benefit to customers of identifying a false void conservatively at £315 per property, this amounts to £4.6m for each 1% reduction in level of false voids we achieve. The outperformance incentive is valued at £2.3m per 1% reduction in false voids, giving a clear net benefit to customers. Further detail on the detailed design of this outperformance incentive valuation is included in the App1 data table commentary and AFW.OC.A18 below.

We are aware from Ofwat's IAP query response AFW_QUERY_014 that the perverse incentives referred to in the action relate to a scenario where a company might have an incentive to inaccurately register a property as in charge, to earn an outperformance payment, without seeing the corresponding additional revenue from having the additional property in charge to offset the incentive payment.



The scenario outlined could not occur using our existing customer billing system. Bringing a property into charge automatically generates a customer bill, which in turn reduces bills for other customers. If the property is empty, this will result in bad debt which will cost the company more money than it would have earn from an outperformance payment. We are confident that our customer billing system implicitly incentivises ourselves to prevent the Ofwat perverse incentive scenario from occurring.

As we move into AMP7 and the voids level PC will become a financial ODI. As with all our existing AMP6 financial PCs and ODIs we will ensure that they formally fall within the scope of our Reporter's audit at year end.

2.17.3 Implications across the plan

See section 2.16.3 above.

2.17.4 Assurance

See section 2.1.4 above.

2.17.5 Evidence

Table 33: Evidence to support the response to AFW.OC.A16

Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019

2.18 AFW.OC.A18

2.18.1 Overview of test area action

Table 34: Action details for AFW.OC.A18

Action Ref.	Action
AFW.OC.A18	Gaps & Voids: The company should outline the basis on which its ODI rates have been calculated and demonstrate that they do not exceed the reduction in bills that customers would experience from a reduction in void sites.

Nature of adjustment: action completed

2.18.2 Our response

The basis for our calculations is as follows:

Cost

• The cost for locating a false void is entirely Opex based. We have calculated a cost of £28 per void detected.

Benefit

• We compute the false void benefit using "avoided loss of wholesale revenue". To do this, we take our current average water bill (£175) and net off the cost to serve (retail)



component, on average £20. This gives a "wholesale revenue" water bill of £155. We then take Thames' current sewerage bill (£180) and net off the average cost to serve, giving a "wholesale revenue" sewerage bill of £160. We add these two numbers together to get an indicative total wholesale revenue bill of £315. This figure represents one year of lost revenue for one false void.

• Given that we are aware of voids, and we will eventually detect them, we make the conservative assumption that each false void only equates to one year of lost revenue.

We apply the Ofwat penalty formula to this calculation:

- Underperformance = 315 (28 * 0.5) = £301
- Outperformance = 315 * (1-0.5) = £157.5

Given that to earn a reward, we would need to spend £28, our potential reward is £157.5 – £28 = £129.5.

This is less than the absolute value of a finding a false void (£315) and the "customer share" of the reward (£157.5).

Please also note that for the PC we express the rates and units as "voids as a % of total household billed properties", which requires an additional calculation that nevertheless does not change the underlying valuations.⁴

2.18.3 Implications across the plan

See section 2.16.3 above.

2.18.4 Assurance

See section 2.1.4 above.

2.18.5 Evidence

Table 35: Evidence to support the response to AFW.OC.A16

Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019

2.19 AFW.OC.A19

2.19.1 Overview of test area action

⁴ We take our total property number (1,458,000) and divide by 100. This gives a 1% of total billed properties figure of 14,580. We multiply the cost and benefit valuations by this number to get £/1% void reduction. Please see App1 Table Commentary for more details.



Table 36: Action details for AFW.OC.A19

Action Ref.	Action
AFW.OC.A19	Risk of severe restrictions in a drought PC: The company should explain its level of stretch and submit the intermediate calculation outputs as shown in the common definition guidance published on our website for the drought resilience metric.

Nature of adjustment: action completed

2.19.2 Our response

Our PC target and level of stretch for risk of severe restrictions in a drought is **dictated** by our rdWRMP.

In the years 2020/21 to 2023/24 we assume that we are able to access drought orders and permits that would allow us to avoid severe restrictions in the event of a 1 in 200 year drought. This is our interpretation of the common definition guidance for the drought resilience metric; specifically:

This may include drought orders and permits where these are likely to be permitted (consistent with a company's WRMP) and where the benefits reflect those that would be considered reasonable in a 1-in-200 year drought.

In our September Plan we interpreted the common definition guidance differently. This is the primary cause of the movement in the PC target we submitted in the September Plan compared to the one in this Revised Plan.

The balance improves from 2018/19 and 2019/20 where there is some risk of restrictions as a result of the schemes identified in the rdWRMP, which are primarily leakage and PCC reduction. The risk therefore falls to 0% by the start of AMP7. (The risk in 2018/19 is obviously theoretical only as the year has virtually completed at the point of submission of this document with no risks being realised.)

During AMP7 the net movement of schemes and demand changes forecast in the WRMP keeps the risk at 0%. In 2024/25 the Sundon conditioning works will be commissioned, which will enable the company to have a 0% risk without relying on the use of drought orders and permits, effectively improving resilience even further. These forecasts are all consistent with the rdWRMP.

The required intermediate calculation outputs, as shown in the common definition guidance, are attached as appendix OC.A19.1.

2.19.3 Implications across the plan

The implication of our response on this action is not material to our Revised Plan.

2.19.4 Assurance

See section 2.1.4 above and rdWRMP Atkins report.

2.19.5 Evidence

Table 37: Evidence to support the response to AFW.OC.A19

Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019



OC.A11.1	rdWRMP Atkins report
OC.A19.1	Drought resilience metric: intermediate calculation outputs

2.20 AFW.OC.A20

2.20.1 Overview of test area action

Table 38: Action details for AFW.OC.20

Action Ref.	Action
AFW.OC.A20	Compliance Risk Index (CRI): The company should provide the additional information set out in 'Technical Appendix 1: Delivering Outcomes for Customers' to allow us to better understand the causes of variation in ODI rates for CRI and assess the appropriateness of the company's customer valuation evidence supporting its ODI. The company should explain and evidence how its proposed ODI rate for CRI is coherent with the rates proposed for other asset health PCs.

Nature of adjustment: action completed

2.20.2 Our response

As set out in section 2.4.2 earlier, we will use the average industry outperformance and underperformance rates for all common PCs in our Revised Plan for 01 April 2019. This will ensure our ODI rates align with benchmark data published by Ofwat.

We have also commissioned further willingness to pay research so we can develop triangulated rates based on our September Plan, Ofwat benchmark data and our own customer preferences and valuation. The additional research will not be available for our Revised Plan submission on 01 April 2019 so we will provide further information to Ofwat by 24 May 2019 if the evidence from the additional research suggests a further refinement of our ODI incentive rates is necessary following final triangulation. This will include addressing the additional information set out in 'Technical Appendix 1: Delivering Outcomes for Customers'

For further details, please see App1 table commentary and App1, Line 7.

2.20.3 Implications across the plan

This significantly higher ODI rates will give result much greater financial exposure on a relatively new measure. The wider reputational impact for the sector could be significant. Given the importance of water quality performance it is questionable whether the greater financial exposure will lead to stronger incentives.

2.20.4 Assurance

See section 2.1.4 above.

Table 39: Evidence to support the response to AFW.OC.A20



Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019
OC.A4.1	Ofwat, "Technical Appendix 1: Delivering Outcomes for Customers" January 2019, page 30.

2.21 AFW.OC.A21

2.21.1 Overview of test area action

Table 40: Action details for AFW.OC.A21

Action Ref.	Action
AFW.OC.A21	Compliance Risk Index (CRI): We propose to intervene to ensure companies perform to the regulatory requirement of 100% compliance against drinking water standards. As set out in the methodology we noted a deadband may be appropriate. It is important that the range of underperformance to the collar is adequate to provide clear incentives for companies to deliver statutory requirements. The company should set a deadband at 1.50 and collar at 9.5 for 2020-25.

Nature of adjustment: alternative approach

2.21.2 Our response

This response should be read in conjunction with our response to AFW.OC.A7 and our general approach to customer protection. Our Revised Plan retains a deadband of 2.8 which is consistent with industry average performance in 2017. The CRI is still a relatively new measure and not sufficiently well established and we believe this deadband is appropriate to mitigate the risk from the transition to a new measure. In addition, as set out in AFW.OC.A4, we will use the average industry underperformance rate for CRI in our Revised Plan for 01 April 2019. This will ensure our ODI rates align with benchmark data published by Ofwat. However, we have commissioned further willingness to pay research so we can develop triangulated rates based on our original submission, Ofwat benchmark data and our own customer preferences and valuation. The additional research will not be available for our Revised Plan submission on 01 April 2019 so we will provide further information to Ofwat by 24 May 2019 if the evidence from the additional research suggests a further refinement of our ODI incentive rates is necessary following final triangulation.

Underperformance collar

We have amended our underperformance collar in our Revised Plan but not removed it. Given the underlying increase in incentive rates (AFW.OC.A4) any operational underperformance now carries more significantly more financial risk. Our proposal is to set the penalty collar at a CRI score of 6, equivalent to 3.2 points above the deadband. This makes the maximum financial exposure equivalent more than our September Plan (2.8 deadband and 4.0 collar) but less than Ofwat's proposal (1.5 deadband and 9.5 collar). We have set the collar so that we are compliant with page 22 of IAP Technical Appendix 1: Delivering Outcomes for Customers, as the underperformance payment collar is set at a level where underperformance



payments would comfortably exceed the 10% threshold if the collar was not in place. This also ensures that the overall balance of incentives across the PC and ODI framework are aligned with customer priorities.

2.21.3 Implications across the plan

The ODI rate, even with the deadband of 2.8 and outperformance collar of 6.0 still give much greater financial exposure. See section 2.20.3.

2.21.4 Assurance

See section 2.1.4 above.

2.21.5 Evidence

Table 41: Evidence to support the response to AFW.OC.A21

Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019

2.22 AFW.OC.A22

2.22.1 Overview of test area action

Table 42: Action details for AFW.OC.A22

Action Ref.	Action
AFW.OC.A22	Unplanned outage: The company is required to provide fully audited 2018-19 performance data by 15 May 2019. This should take the form of an early APR submission, but only for Unplanned Outages. Board assured data can be provided with the main APR in July 2019, any changes will be taken into account for the Final Determination. Based on the latest performance and updated methodologies, the company should resubmit 2019-20 to 2024-25 forecast data in the 15 May 2019 submission. The company should also report its current and forecast company level peak week production capacity (PWPC) (MI/d), the unplanned outage (MI/d) and planned outage (MI/d) in its commentary for the May submission.

Nature of adjustment: action due later

2.22.2 Our response

We will ensure that we provide fully audited 2018-19 performance data by 15 May 2019 as requested including forecast data for 2019-20 to 2024-25 based on latest performance and updated methodologies. In the commentary to the 15 May 2019 submission we will report current and forecast company level peak week production capacity, unplanned outage and planned outage.

2.22.3 Implications across the plan



Responding to the action has no implications for our Revised Plan.

2.22.4 Assurance

Assurance for our 15 May 2019 data submission will be provided by our Reporter Atkins. Board assured data will be provided with the main APR submission on 15 July 2019.

2.22.5 Evidence

Not applicable to this action.

2.23 AFW.OC.A23

2.23.1 Overview of test area action

Table 43: Action details for AFW.OC.A23

Action Ref.	Action
AFW.OC.A23	Unplanned outage: The company should explain and evidence how its proposed ODI rate for unplanned outages is coherent with the rates proposed for PCs relating to the associated customer facing-impacts of the asset failure and demonstrate how the package of ODIs across the relevant group of PCs appropriately incentivises performance in the long and short- term. The company should also provide the additional information set out in 'Technical Appendix 1: Delivering Outcomes for Customers' to allow us to better understand the causes of variation in ODI rates for unplanned outages and assess the appropriateness of the company's customer valuation evidence supporting its ODI.

Nature of adjustment: action completed

2.23.2 Our response

As set out in section 2.4.2 earlier, we will use the average industry outperformance and underperformance rates for all common PCs in our Revised Plan for 01 April 2019. This will ensure our ODI rates align with benchmark data published by Ofwat.

We have also commissioned further willingness to pay research so we can develop triangulated rates based on our September Plan, Ofwat benchmark data and our own customer preferences and valuation. The additional research will not be available for our Revised Plan submission on 01 April 2019 so we will provide further information to Ofwat by 24 May 2019 if the evidence from the additional research suggests a further refinement of our ODI incentive rates is necessary following final triangulation. This will include addressing the additional information set out in 'Technical Appendix 1: Delivering Outcomes for Customers'.

For further details, please see App1 table commentary and App1, Line 5.

2.23.3 Implications across the plan

This lower ODI rates will slightly reduce incentives to avoid unplanned outage but the overall impact is broadly consistent with our September Plan.



2.23.4 Assurance

See section 2.1.4 above.

2.23.5 Evidence

Table 44: Evidence to support the response to AFW.OC.A23

Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019
OC.A4.1	Ofwat, "Technical Appendix 1: Delivering Outcomes for Customers" January 2019, page 33.

2.24 AFW.OC.A24

2.24.1 Overview of test area action

Table 45: Action details for AFW.OC.A24

Action Ref.	Action
AFW.OC.A24	Number of burst mains: The company should reconsider its proposed service levels and ensure that they are stretching. If the company continues to propose performance that is worse than its historical levels, we will expect compelling evidence that increased active leakage control impacts the total number of mains repairs using the company's own data, including the relationship between pro-active and reactive mains repairs. As a minimum the evidence should show the historical correlation between active leakage control, pro-active and reactive mains repairs. It should also show the impact of this relationship on forecast repair rates from the output of asset performance modelling. The company should also demonstrate the reduced (worse) performance levels are in the interests of customers and the assets.

Nature of adjustment: alternative approach

2.24.2 Our response

Maintaining our existing performance target into AMP7 will be increasingly challenging given the significant improvements we are committing to in respect of leakage reduction, supply interruptions and low-pressure. Taken together our Revised Plan is demonstrating significant ambition to improve overall network performance against the backdrop of maintaining mains burst performance. The reduced leakage targets we are aiming to deliver will require substantial increased active leakage control. This pro-active leakage activity will increase the risk of greater burst rates which will make maintenance of historic target levels increasingly challenging.

Ofwat explicitly recognised this at PR04 when the burst target for one of our predecessor companies, Three Valleys Water, was specifically and temporarily (AMP4) increased by 288 bursts to allow for the reducing leakage target. Low pressure problems are alleviated by



increasing water pressure in the network, usually by installing booster pumps or modifying/removing pressure reduction valves. Our improvements to supply interruptions will inevitably lead to more rezoning, diversions and rerouting of water. Water networks are systems which operate in rough equilibrium and these changes will, on occasion lead to bursts. Not all rezones cause bursts, but some rezones will cause several bursts, and this is a widely recognised across water operations managers. Taken together, all three of these planned changes will tend to drive up burst numbers. This means that, in reality, a stable burst target will become progressively more difficult to maintain.

Figure 4 shows our burst profile for the past year and clearly demonstrates that during the winter, as increased active leakage detection effort was increased, we experienced a corresponding increase in the number of detected leaks and a higher proportion of total bursts. This trend is not expected given the level of active leakage control effort that was taking place. This underlying upward pressure in total bursts will need to be managed carefully to maintain existing targets.

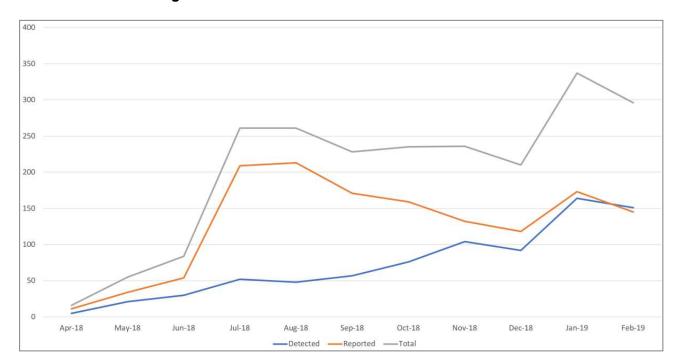


Figure 4: Total number of burst mains 2018-19

In light of this we have reconsidered our proposed burst mains service levels and decided to continue to maintain our existing mains burst targets which have been in place since the beginning of AMP4.

In addition we know from our six-phased customer engagement programme, as detailed in 'Chapter 3 Listening to Customers and Stakeholders' and supporting appendices, that customers continue to prioritise service issues that impact them directly. This does not include the numbers of bursts mains as often this does not result in an interruption to supply.

We don't agree with Ofwat's assessment that recent historical performance, during benign years, means that maintaining our historic reference level as an ongoing target for AMP7 is a worsening of performance for customers. This is an underperformance only PC, where our objective is not improved performance, but stable performance. This is consistent with maintaining intergenerational equity by ensuring stable serviceability of the network over time. Any deterioration in the network over time would shift cost onto future generations, who



would have to restore serviceability, while improvement would bring forward cost onto current customers. Our approach, supported by customers, is to maintain stability by adopting the same target that has applied to the company for the last three AMPs.

2.24.3 Implications across the plan

Responding to the action has no implications for our Revised Plan. Even though we are demonstrating significant ambition to improve overall network performance against the backdrop of maintaining mains burst performance we are not seeking additional funding to deliver our commitments.

2.24.4 Assurance

See section 2.1.4 above.

2.24.5 Evidence

Table 46: Evidence to support the response to AFW.OC.A24

Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019

2.25 AFW.OC.A25

2.25.1 Overview of test area action

Table 47: Action details for AFW.OC.A25

Action Ref.	Action
AFW.OC.A25	Number of burst mains: The company should explain and evidence how its proposed ODI rate for mains bursts is coherent with the rates proposed for PCs relating to the associated customer facing- impacts of the asset failure (including leakage, supply interruptions and low pressure) and demonstrate how the package of ODIs across the relevant group of PCs appropriately incentivises performance in the long and short- term. The company should also provide the additional information set out in 'Technical Appendix 1: Delivering Outcomes for Customers' to allow us to better understand the causes of variation in ODI rates for mains bursts and assess the appropriateness of the company's customer valuation evidence supporting its ODI.

Nature of adjustment: action completed

2.25.2 Our response

As set out in section 2.4.2 earlier, we will use the average industry outperformance and underperformance rates for all common PCs in our Revised Plan for 01 April 2019. This will ensure our ODI rates align with benchmark data published by Ofwat.



We have also commissioned further willingness to pay research so we can develop triangulated rates based on our September Plan, Ofwat benchmark data and our own customer preferences and valuation. The additional research will not be available for our Revised Plan submission on 01 April 2019 so we will provide further information to Ofwat by 24 May 2019 if the evidence from the additional research suggests a further refinement of our ODI incentive rates is necessary following final triangulation. This will include addressing the additional information set out in 'Technical Appendix 1: Delivering Outcomes for Customers'.

We have attempted to separate, as far as possible, the ODI rate for mains bursts from PCs and ODIs for associated customer facing impacts of asset failures. The rate for supply interruptions is designed to reflect the disutility to the customer of the interruption. Leakage ODIs are similarly designed to reflect customers expressed preferences and willingness to pay. Our bursts ODI is designed to incentivise the company to maintain intergenerational equity and a constant level of network serviceability (neither an improvement nor a deterioration). The ODI. The ODI rate is therefore designed to incentivise the company to spend enough money on maintaining the network to prevent deterioration – it is a penalty only ODI. The rate therefore ensures that the company cannot save money by avoiding maintenance expenditure – because it will incur the full value of the money save in underperformance payments if it attempts to do so.

For further details, please see App1 table commentary and App1, Line 6.

2.25.3 Implications across the plan

This marginally lower ODI rates will have little implication as the overall impact is consistent with our September Plan.

2.25.4 Assurance

See section 2.1.4 above.

2.25.5 Evidence

Table 48: Evidence to support the response to AFW.OC.A25

Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019
OC.A4.1	Ofwat, "Technical Appendix 1: Delivering Outcomes for Customers" January 2019, page 32.

2.26 AFW.OC.A26

2.26.1 Overview of test area action

Table 49: Action details for AFW.OC.A26

Action Ref.	Action
AFW.OC.A26	Number of burst mains: The company should reconsider whether to apply an underperformance collar to this PC, taking account of its broader approach to customer protection.



If the company decides to retain the collar, it should provide a convincing ODI-specific justification for this decision, and it should consider whether to change the level of the collar. The company's justification should refer to the proposed level of the collar, and it should explain why that particular level has been chosen and how this compensates customers adequately for poor service performance.
--

Nature of adjustment: alternative approach

2.26.2 Our response

This response should be read in conjunction with our response to AFW.OC.A7 and our general approach to customer protection and AFW.OC.24. Our approach has considered the balance of incentives across the whole PC framework and the alignment with customer priorities. Given this we have amended our underperformance collar in our Revised Plan but not removed it. Our proposal is to set the penalty collar at 200 busts per 1,000km consistent just beyond our P10 performance scenario. This means that in the event we experience a P10 performance we will incur the full underperformance incentive before the collar would take effect.

2.26.3 Implications across the plan

This implication of this change will have little impact and is broadly consistent with our September Plan

2.26.4 Assurance

See section 2.1.4 above.

2.26.5 Evidence

Table 50: Evidence to support the response to AFW.OC.A26

Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019

2.27 AFW.OC.A27

2.27.1 Overview of test area action

Table 51: Action details for AFW.OC.A27

Action Ref.	Action
AFW.OC.A27	Properties experiencing longer or repeated instances of low pressure: The company should either use the original DG2 and long list definition or provide further evidence to support its view that the updated definition is a better and more appropriate measure for the company, for wider stakeholders and for customers. In particular the company should refer to trend analysis which may be potentially more difficult and the poor current levels of performance in this measure which may cause issues with transparency.



Nature of adjustment: action completed

2.27.2 Our response

This measure is now a non-financial ODI. We have introduced a new financial low-pressure PC based on removing properties from the DG2 register as requested, consistent with the common PD definitions. Please see:

- Financial low-pressure DG2 measure (App1, Line 18);
- Non-financial low-pressure measure (App1, Line 10).

See also App1 data table commentary.

2.27.3 Implications across the plan

The implication of this change is described in response to actions AFW.OC.A1, AFW.OC.A2, AFW.OC.A5 and AFW.OC.A6.

2.27.4 Assurance

See section 2.1.4 above.

2.27.5 Evidence

Table 52: Evidence to support the response to AFW.OC.A27

Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019

2.28 AFW.OC.A28

2.28.1 Overview of test area action

Table 53: Action details for AFW.OC.A28

Action Ref.	Action
AFW.OC.A28	Properties experiencing longer or repeated instances of low pressure: The company should revise its targets so that the starting levels for the period 2020-25 are challenging, it should also revise its stretch level for the period 2020-25 as a whole based on this. We expect compelling evidence why the levels that the company proposes are in the best interest of customers particularly if it retains the less stretching targets.

Nature of adjustment: action completed

2.28.2 Our response

This measure is now a non-financial ODI. This is a new ODI, so we are not able to robustly compare this data to historical data, or to data from other companies (which is not available). The target has been set as a stretching improvement on what we calculate current performance to be. We estimate current performance based on the 30% of the network is covered by pressure monitors. We are currently in the process of covering the whole network



(primarily as a leakage control measure). Until this programme is complete and all the new loggers are tested, verified and calibrated, we will not be able to do any more than estimate our performance in this ODI. Nevertheless, we expect the work we are doing to improve pressure monitoring will demonstrate the stretch within our PC target.

Additionally, we have introduced a new financial low-pressure PC based on removing properties from the DG2 register as requested. Please see:

- Financial low-pressure DG2 measure (App1, Line 18);
- Non-financial low-pressure measure (App1, Line 10).

See also App1 data table commentary.

2.28.3 Implications across the plan

The implication of this change is described in response to actions AFW.OC.A1, AFW.OC.A2, AFW.OC.A5 and AFW.OC.A6.

2.28.4 Assurance

See section 2.1.4 above.

2.28.5 Evidence

Table 54: Evidence to support the response to AFW.OC.A28

Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019

2.29 AFW.OC.A29

2.29.1 Overview of test area action

Table 55: Action details for AFW.OC.A29

Action Ref.	Action
AFW.OC.A29	Properties experiencing longer or repeated instances of low pressure: The company should provide further evidence to justify the use of an outperformance payment for this PC, including evidence of customer support.

Nature of adjustment: no longer applicable

2.29.2 Our response

This measure is now a non-financial ODI. We have introduced a new financial low-pressure PC based on removing properties from the DG2 register as requested. Please see:

- Financial low-pressure DG2 measure (App1, Line 18);
- Non-financial low-pressure measure (App1, Line 10).



See also App1 data table commentary.

2.29.3 Implications across the plan

The implication of this change is described in response to actions AFW.OC.A1, AFW.OC.A2, AFW.OC.A5 and AFW.OC.A6.

2.29.4 Assurance

See section 2.1.4 above.

2.29.5 Evidence

Table 56: Evidence to support the response to AFW.OC.A29

Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019

2.30 AFW.OC.A30

2.30.1 Overview of test area action

Table 57: Action details for AFW.OC.A30

Action Ref.	Action
AFW.OC.A30	Properties experiencing longer or repeated instances of low pressure: The company should reconsider the proposed ODI rates and either provide evidence to demonstrate why the subset of values selected to formulate its marginal benefit and outperformance payment are appropriate, or resubmit lower outperformance payments in line with customer evidence. If the company retains its outperformance payments it should pay regard to the principle that underperformance payments should be higher than outperformance payments.

Nature of adjustment: no longer applicable

2.30.2 Our response

This measure is now a non-financial ODI. We have introduced a new financial low-pressure ODI based on removing properties from the DG2 register. Please see:

- Financial low-pressure DG2 measure (App1, Line 18);
- Non-financial low-pressure measure (App1, Line 10).

See also App1 data table commentary.

2.30.3 Implications across the plan

The implication of this change is described in response to actions AFW.OC.A1, AFW.OC.A2, AFW.OC.A5 and AFW.OC.A6.



2.30.4 Assurance

See section 2.1.4 above.

2.30.5 Evidence

Table 58: Evidence to support the response to AFW.OC.A30

Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019

2.31 AFW.OC.A31

2.31.1 Overview of test area action

Table 59: Action details for AFW.OC.A31

Action Ref.	Action
AFW.OC.A31	Properties experiencing longer or repeated instances of low pressure: The company should reconsider whether to apply an underperformance collar to this PC, taking account of its broader approach to customer protection. If the company decides to retain the collar, it should provide a convincing ODI-specific justification for this decision. This should include justification for the level at which the collar is set, with the company explaining how this compensates customers adequately for poor service performance.

Nature of adjustment: no longer applicable

2.31.2 Our response

This measure is now a non-financial ODI. We have introduced a new financial low-pressure ODI based on removing properties from the DG2 register. Please see:

- Financial low-pressure DG2 measure (App1, Line 18);
- Non-financial low-pressure measure (App1, Line 10).

See also App1 data table commentary.

2.31.3 Implications across the plan

The implication of this change is described in response to actions AFW.OC.A1, AFW.OC.A2, AFW.OC.A5 and AFW.OC.A6.

2.31.4 Assurance

See section 2.1.4 above.

2.31.5 Evidence

Table 60: Evidence to support the response to AFW.OC.A31



Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019



2.32 AFW.OC.A32

2.32.1 Overview of test area action

Table 61: Action details for AFW.OC.A32

Action Ref.	Action
AFW.OC.A32	Customers in vulnerable circumstances satisfied with our service PC: The company should split this PC into 2 PCs, one for financial and one for non-financial support scheme support. This would support more transparent measurement and reporting than the current PC proposes. In addition, the company should provide additional evidence on the sample size used in the monthly survey to determine the PC target and provide external assurance that the survey will be conducted in line with social research best practice.

Nature of adjustment: action completed

2.32.2 Our response

We will implement Ofwat's suggestion to separate into two groups of:

- financial support scheme
- non-financial support (PSR customers)

We have identified the sample size of the "PSR group" is currently low – around 2% of current SMS survey response volumes (see appendix OC32.1). However, we recognise with the planned growth of our PSR to around 106,817 households by 2025 the "PSR Group" will increase in size (detailed in test area Addressing Affordability and Vulnerability, action AFW.AV.A5). We anticipate the accumulative response rates across the surveys to be approximately 12% based on growth of the sample size and response rates over the 2020-2025 period.

To ensure the satisfaction survey is inclusive and representative, we have reviewed the overall contact received from both groups of customers by channel (see appendix OC32.A2) This identified an opportunity to increase the number of channels we use to survey customers to gain a broader range of customer views and enable a bigger sample size than just using one channel for feedback.

Additionally, to support a viable sample size we will introduce a periodic proactive satisfaction survey for both groups of customers who have not contacted us within 12 months. The survey will be conducted via SMS and email dependent on available data.

Channels to be included: SMS, Web, Email, Letter and end of call telephone survey to maximise the inclusivity of the response.

The PCs will be defined as below:

PC1: Financial support scheme customers satisfied with our service		
Definition	•	Survey of Affinity Water's customers who are: o receiving financial assistance through the WaterSure tariff or our social
		tariff; and/or



- recorded on our billing system as on flexible payment plans, being bespoke payment plans mutually agreed with the customer based on an affordability assessment
- Of these customers, we will ascertain the percentage satisfied with the service they have received from Affinity Water following an interaction with us, that is about a billing/financial query (excluding operational or metering queries) to ensure the response focuses on the financial support element of the service.
- Proactive periodic survey to customers who have not contacted within 12 months who are:
 - receiving financial assistance through the WaterSure tariff or our social tariff; and/or
 - recorded on our billing system as on flexible payment plans, being bespoke payment plans mutually agreed with the customer based on an affordability assessment

We anticipate the accumulative response rate across the surveys to be approximately 26% based on growth of sample size and predicted response rates.

PC2: Non-financial support customers satisfied with our service

Definition

- Survey of Affinity Water's customers who are:
 - Registered on our Priority Services Register (PSR).
 - Of these customers, we will ascertain the percentage satisfied with the service they have received from Affinity Water following an interaction with us.
- Proactive periodic survey to customers who have not contacted within 12 months who are:
- Registered on our Priority Services Register (PSR)

We anticipate the accumulative response rate across the survey to be approximately 12% based on growth of the sample size and predicted response rates.

For both measures, the following will apply:

Unit	The percentage of customers scoring 7-10 out of 10 in the survey asking the question: "On a scale of $0-10$ how satisfied are you with the service you received from Affinity Water?"
	7- 10 is defined as being satisfied (10 being very satisfied and 0 is not at all satisfied).
Target	The target is to achieve an accumulative average score of 90% satisfied or higher across channels for AMP7
	 We undertook analysis from feedback between April 17 and September 18 to understand the potential volumes of feedback we would receive from these customer groups for the new PCs, and received monthly average of 779 feedback responses for PC1 and a monthly average of 225 feedback responses for PC2 (see appendices OC32.A1, OC32.A2, OC32.A3)



Until the implementation of the new channels and proactive surveys, we are yet to fully understand if the response rates are a representative sample size. We will continuously review and track response rates through monthly dashboards. We will use the external expertise to provide industry best practice on maximising feedback.

The surveys will be conducted in line with social research best practice. Please see section 3.32.4 below for more detail.

In our September Plan, we said we would work with our Third-Party Partners and use their expertise to test our service for satisfaction, to ensure we continue to drive best practice. This activity will run alongside the satisfaction customer surveys which we will use for the PCs, and will better reflect the "Experience" side of the C-MeX surveys, surveying a selection of customers each quarter, including those who have not contacted us.

2.32.3 Implications across the plan

Performance Commitments updated.

2.32.4 Assurance

We have undertaken assurance activities to review compliance with social research best practice. We note Ofwat guided companies to the Market Research Society (MRS) for guidance, in the webinar held during February 2019.

The primary supplier conducting the surveys used for measuring performance, Rant & Rave, has undertaken a review and has demonstrated where the methodology complies with specific standards called out by MRS codes (see appendix OC32.1 and OC.A32.1). Rant & Rave provide the SMS and digital surveys and we recognise these may not be accessible to all customers and therefore have added additional channels for those contacting us by landline, via email. or whitemail.

External assurance will also be obtained through BSI 18477 (see appendix OC.A32.6). Part of the framework is to test 'provision of information' and ensure products and services are accessible and usable for all customers this will include customer surveys.

2.32.5 Evidence

Table 62: Evidence to support the response to AFW.OC.A32

Appendix	Description			
OC.A32.1	SMS feedback analysis (PC2)			
OC.A32.2	Financially vulnerable by channel (PC1)			
OC.A32.3	SMS Example process flow chart for satisfaction and ease			
OC.A32.4	MRS research guidelines			



OC.A32.5	Application of MRS research guidelines to our PCs
OC.A32.6	Framework for BSI 18477

2.33 AFW.OC.A33

2.33.1 Overview of test area action

Table 63: Action details for AFW.OC.A33

Action Ref.	Action
AFW.OC.A33	Customers in vulnerable circumstances satisfied with our service PC: The company should revise its performance level to at least meet current satisfaction levels.

Nature of adjustment: action completed

2.33.2 Our response

We have taken on board Ofwat's comments and have reviewed the previously set target of 82%, which was based on the research we had at the time. This research was only based on an SMS channel, not additional channels which we will need to use to ensure a statistical representative sample. We will work with third parties who traditionally found responses from customers in vulnerable circumstances can be restricted and depending on the type of contact can be low.

To ensure the sample size is 'inclusive' and follows the best practice principles of Social Research we will introduce more channels, including, email, letter, an end of call telephone survey and a proactive survey to reach as many customers in vulnerable circumstances.

Until the implementation of the new channels and proactive surveys (as defined in action OC.A32), we are yet to fully understand the performance level of the new measures. However, shadow satisfaction scores have been running across two channels producing significant differences in their results.

- After call SMS satisfaction survey, the satisfaction level for this group of customers is 91%
- Online customer satisfaction survey, satisfaction level across all customers is currently running at 68%
 - Therefore, current performance across both SMS and online is between 68% and 91%. The online lower score is representative of the findings of the C-MeX pilots conducted to date, which has noted digital channels score lower typically across all water companies. Ofwat will be adding a positive weighting to the digital channels for C-MeX following pilots across the industry showing these channels score lower. Typically, though SMS will be the larger channel which customers will use to feedback their responses, following trends seen today, however the digital channel satisfaction will indeed reduce the overall



average, hence concluding that accumulative 90% score across both channels is an appropriate stretching target.

Taking onboard the separation of the PC's, the difference between the two-channel satisfaction scores and the level of responses received, we believe the overall results would be higher than the 82% previously set but unlikely to be as high as the current SMS satisfaction score. On this basis, we propose to set the new accumulative stretching measure of 90% satisfied across both channels for AMP7. Surveys will be in 'real time', tracked monthly and the average will be reported annually.

In our September Plan, we had set the satisfaction percentage of customers scoring 4/5 or 5/5 in the survey after asking the questions: "On a scale of 1-5 how satisfied are you with the service you received from Affinity Water?" As part of the C-MeX working group, we have recognised we should align the scoring mechanism of the satisfaction survey and propose to change to align with the scale used for C-MeX. The scale we will use is 0-10, 10 being very satisfied and 0 not at all satisfied. Therefore, in the survey we will ask the question: "On a scale of 0-10 how satisfied are you with the service you received from Affinity Water?".

This PC seeks to monitor and improve the service offered to current customers in vulnerable circumstances, however the nature of this PC will ensure lessons learned are acted upon to continually improve our service.

2.33.3 Implications across the plan

Performance Commitments updated.

2.33.4 Assurance

CCG review and challenge of proposals.

2.33.5 Evidence

Table 64: Evidence to support the response to AFW.OC.A33

Appendix	Description
OC.A3.1	Supplementary report to Ofwat from the Affinity Water Customer Challenge Group (29 March 2019)

2.34 AFW.OC.A34

2.34.1 Overview of test area action

Table 65: Action details for AFW.OC.A34

Action Ref.	Action
AFW.OC.A34	Customers in vulnerable circumstances who found us easy to deal with PC: The company should split this PC into 2 PCs, one for financial and one for non-financial support scheme support. This would support more transparent measurement and reporting than the current PC proposes. In addition, the company should provide additional evidence on the sample size used in the monthly survey to determine the PC target for



and provide external assurance that the survey will be conducted in line
with social research best practice.

Nature of adjustment: action completed

2.34.2 Our response

We will implement Ofwat's suggestion to separate into 2 groups of:

- financial support scheme
- those in non-financial support scheme. (PSR customers).

We have identified the sample size of the "PSR group" is currently low – around 2% of current SMS survey response volumes (see appendix OC32.A1). However, we recognise with the planned growth of our PSR circa 106,817 households by 2025 and our Performance Commitment associated PSR (AV:A5) We anticipate the accumulative response rates across the surveys to be approximately 12% based on growth of the sample size and response rates over the 2020-2025 period.

To ensure the "ease" survey is inclusive and representative, we have reviewed the overall contact received from both groups of customers in vulnerable circumstances by channel. This identified an opportunity to increase the number of channels we use to survey customers to gain a broader range of customer views and enable a bigger sample size than just using one channel for feedback.

Additionally, to support a viable sample size we will introduce periodic proactive ease surveys for both groups of customers who have not contacted us within 12 months. The survey will be conducted via SMS and email dependent on available data.

Channels to be included: SMS, Web, Email, Letter and end of call telephone survey to maximise the inclusivity of the response.

Table 66: PC1 – financial support scheme customers who found us easy to deal with

PC1: Financial support scheme customers who found us easy to deal with

Definition

- Survey of Affinity Water's customers who are:
 - receiving financial assistance through the WaterSure tariff or our social tariff: and/or
 - recorded on our billing system as on flexible payment plans, being bespoke payment plans mutually agreed with the customer based on an affordability assessment
- Of these customers, we will ascertain the percentage "who found it easy to do business with Affinity Water", following an interaction with us, that is about a billing/financial query (excluding operational or metering queries) to ensure the response focuses on the financial support element of the service.
- Proactive periodic survey to customers who have not contacted within 12 months who are:

receiving financial assistance through the WaterSure tariff or our social tariff; and/or recorded on our billing system as on flexible payment plans,



being bespoke payment plans mutually agreed with the customer based on an affordability assessment

We anticipate the accumulative response rate across the surveys to be approximately 21% based on growth of sample size and predicted response rates.

Table 67: PC2 – non-financial support scheme customers who found us easy to deal with

PC2: Non-	-financial support customers who found us easy to deal with		
Definition	 Survey of Affinity Water's customers who are: Registered on our Priority Services Register (PSR). Of these customers, we will ascertain the percentage of customers "who found it easy to do business with Affinity Water" Proactive periodic survey to customers who have not contacted within 12 months who are: 		
	Registered on our Priority Services Register (PSR)		
	We anticipate the accumulative response rate across the survey to be approximately 12% based on growth of the sample size and predicted response rates.		
Unit	In our September Plan we had proposed a PC to measure 'ease' using a scoring metric of 1 – 10 (where 1 = easy and 10 = hard) The target set was achieving a score of 4.8 or lower out of 10 (where 1 is the best score across the AMP. Please note this is the opposite to how C-MeX is now being measured where 10 is highest score and so we understand this was perhaps confusing based on Ofwat feedback suggesting our target was lower than it was defined to be.		
	Our new scoring, will be the percentage of customers scoring 7-10 out of 10 in the survey asking the question: "On a scale of $0-10$ "How easy are Affinity Water to do business with?" 7- 10 is defined as being easy (10 being very easy and 0 is not at all easy).		
Target	The target is to achieve an accumulative score of 90% or more customers scoring us 7-10/10 across channels for AMP7		
	We have made the survey easy and accessible across multiple channels.		

Until the implementation of the new channels and proactive surveys, we are yet to fully understand if the response rates are a representative sample size particularly on "ease". We will continuously review and track response rates through monthly dashboards. We will use the external expertise to provide industry best practice on maximising feedback.

The surveys will be conducted in line with social research best practice. Please see section 2.34.4 below for more detail.

In our September Plan, we said we would work with our Third-Party Partners and use their expertise to test our service for 'ease' to ensure we continue to drive best practice. This activity will run alongside the 'ease' customer surveys which we will use for the PCs, and will better reflect the "Experience" side of the C-MeX surveys, surveying a selection of customers each quarter, including those who have not contacted us.

2.34.3 Implications across the plan



Performance Commitments updated.

2.34.4 Assurance

We have undertaken assurance activities to review compliance with social research best practice. We note Ofwat guided companies to the Market Research Society (MRS) for guidance, in the webinar held during February 2019.

The primary supplier conducting the surveys used for measuring performance, Rant & Rave, has undertaken a review and has demonstrated where the methodology complies with specific standards called out by MRS codes (see appendix OC.A32.4 and OC.A32.5). Rant & Rave provide the SMS and digital surveys and we recognise these may not be accessible to all customers and therefore have added additional channels for those contacting us by landline, via email, or whitemail.

External assurance will also be obtained through BSI 18477 (see appendix OC.A32.6). Part of the framework is to test 'provision of information' and ensure products and services are accessible and usable for all customers this will include customer surveys.

2.34.5 Evidence

Table 68: Evidence to support the response to AFW.OC.A34

Appendix	Description			
OC.A32.1	SMS feedback analysis (PC2)			
OC.A32.2	Financially vulnerable by channel (PC1)			
OC.A32.3	SMS Example process flow chart for satisfaction and ease			
OC.A32.4	MRS research guidelines			
OC.A32.5	Application of MRS research guidelines to our PCs			
OC.A32.6	Framework for BSI 18477			

2.35 AFW.OC.A35

2.35.1 Overview of test area action

Table 69: Action details for AFW.OC.A35

Action Ref.	Action
AFW.OC.A35	Customers in vulnerable circumstances who found us easy to deal with PC: The company should revise its performance level for this PC so that it is more stretching and provide justification for the level of stretch as well.



Nature of adjustment: action completed

2.35.2 Our response

As per action OC.A33, we have taken on board Ofwat's comments and reviewed the scale on which we were going to measure 'easy to deal with' and have now aligned this with the measurement for satisfaction; 0 to 10, measuring the percentage of customers scoring 7-10 in the survey asking, "How easy are Affinity Water to do business with?" 10 is very easy and 0 is not at all.

To ensure the sample size is 'inclusive' and follows the best practice principles of Social Research we will introduce more channels, including, email, letter an end of call telephone survey and a proactive survey to reach as many customers in vulnerable circumstances.

Until the implementation of the new channels and proactive surveys (as defined in AFW.OC.A34), we are yet to fully understand the performance level of the new measures. However, shadow satisfaction/ease scores have been running across two channels producing significant differences in their results.

- After call SMS ease survey, the ease level for this group of customers is 92%
- Online customer satisfaction survey, satisfaction level across all customers is currently running at 68%
 - Therefore, current performance across both SMS and online is between 68% and 92%. The online lower score is representative of the findings of the C-MeX pilots conducted to date, which has noted digital channels score lower typically across all water companies and Ofwat will be adding a positive weighting to the digital channels for C-MeX following pilot across the industry showing these channels score lower. Typically, though SMS will be the larger channel which customers will use to feedback their responses, following trends seen today, however the digital channel satisfaction will indeed reduce the overall average, hence concluding that an accumulative 90% across both channels is an appropriate stretching target.

Taking into consideration the separation of the PC's, the new proposed measurement, the difference between the two-channel scores and the level of responses received, we propose an accumulative stretching performance level of 90% across both channels during AMP7. Surveys will be in 'real time', tracked monthly and the average will be reported annually.

This PC seeks to monitor and improve the service offered to current customers in vulnerable circumstances, however the nature of this PC will ensure lessons learned are acted upon to continually improve our service.

2.35.3 Implications across the plan

New Performance Commitment.

2.35.4 Assurance

CCG review and challenge of proposals.



2.35.5 Evidence

Table 70: Evidence to support the response to AFW.OC.A35

Appendix	Description
OC.A3.1	Supplementary report to Ofwat from the Affinity Water Customer Challenge Group (29 March 2019)

2.36 AFW.OC.A36

2.36.1 Overview of test area action

Table 71: Action details for AFW.OC.A36

Action Ref.	Action
AFW.OC.A36	Environmental innovation - delivery of community projects PC: The company should provide further evidence of customer support for this PC. In particular, the company should provide evidence that customers were presented with choice and context related to the design of the currently proposed PC.

Nature of adjustment: action completed

2.36.2 Our response

Our proposal for a bespoke PC to deliver a number of local environmental projects was developed following advice and challenge from members of our CCG, several of whom have significant experience in environmental issues in our supply area. The proposal featured in draft Water Resources Management Plan research in March 2018, where the concept of pilot projects was tested. In the September Plan, we published for consultation with customers and stakeholders in Spring 2018 and was tested with customers in qualitative focus groups and a quantitative representative survey in Spring 2018 (phase 2 of the Customer Engagement Programme). In that consultation and customer engagement several options were presented for the level of expenditure we could commit to such projects, and as part of proposals for packages of service levels/performance commitments.

The CCG agreed at our request to form a sub working group for "Resilience and Environment", with a focus to challenge and advise on our development of this bespoke PC. This group considered proposals for a few PCs, one of which was for us to undertake several environmental pilot projects which could promote a reduction of water use, promote customer education on the link between water and the environment and improve environmental status. It was suggested by the CCG that pilot projects were undertaken in each of our 8 community areas, which relate to our water resource zones, possibly associating each one to a specific feature of the region. It was also suggested by the CCG that partnering with other organisations such as councils or local river groups, would help to co-create and deliver as well as support and promote such initiatives. The terms of reference of the CCG sub working group are included in appendix OC.A1.1.

During our dWRMP and business plan consultation in March 2018 through to May 2018 we specifically consulted with customers on our environmental innovation PC and a commitment to deliver a number of community projects.



We consulted on two options as part of our dWRMP engagement in Spring 2018, customers were asked in this survey:

Q14. Affinity Water is considering running a number of local projects during 2020-2025. These would be designed to test new approaches to helping customers reduce the amount of water they use, enabling Affinity Water to apply what works to all areas. Examples include working in partnership with schools to help them better understand and reduce their water use and to educate pupils about water use, working with community groups, housing associations, planners and developers to develop more water efficient homes.

Which, if any, of these options (1 and 2 below) do you prefer, or would you prefer another option?

- 1. Option 1 Investing £2 million in local projects. This would mean approximately £0.29 per year being added to the average household bill every year until 2025
- 2. Option 2 Investing £6 million in local projects. This would mean approximately £0.86 per year being added to the average household bill every year until 2025
- 3. I do something else (SPECIFY)
- 4. None of these
- 5. Don't know

In summary of our consultation on the environmental pilot projects

- 82% of customers and stakeholders supported raising awareness of how everyone can help protect the water environment [phase 2 dWRMP survey]
- Nearly 70% supported investment in local environment pilots, term environment seen as particularly positive [phase 2 dWRMP survey, stakeholder BP/dWRMP focus groups]
- 39% prefer the £2m investment, 30% prefer the £6m investment, 30% other/don't know. [phase 2 dWRMP survey]
- The higher figure proposed (£6 million) was favoured by most stakeholders as they saw spending money on environmental pilot project important [phase 2 stakeholder BP/dWRMP focus groups]
- Difficulty in making decision about whether to prioritise these. Some scepticism about the effectiveness of projects and the cost. [phase 2 BP focus groups]

Our Triangulation tool for our PR19 engagement from our September Plan, included our conclusions for all our Performance Commitments. For environmental pilot projects, the detail from Triangulation are presented in the table below.

Table 72: Environmental pilot projects customer engagement conclusions

dWRMP Focus groups	dWRMP online survey	Business Plan discussion groups	WRMP/BP Stakeholder forums
Protecting the	The more modest	Investing in environmental pilot	Supporting the environment
environment was a key	Option 1 - investing	projects stood out to participants	through pilot projects is very
priority for participants	£2 million in local projects – is preferred	across all the groups. For those who prioritised the environment, these	important.
Further detail requested	by 39% of customers,	projects could be a positive step	The connection between the
on environmental pilot	ahead of Option 2	towards long-term sustainable water	money spent on
projects to determine	(£6million) which is	use. They were therefore attracted to	environmental pilot projects
value for money	favoured by 30%.	the plans that proposed larger	and the proposed reductions
value for money	laveared by 6670.	investment in this area.	in abstraction is not clear.
Customers liked the idea	82% supported		
of company collaboration	raising awareness of	Those in the younger and future	It's unclear exactly what
and sharing expertise and	how everyone can	customers groups who liked the idea	these 'pilot projects' are,
suggested a water	help protect the water	of the pilot projects, were hesitant	where they will be or how



dWRMP Focus groups	dWRMP online survey	Business Plan discussion groups	WRMP/BP Stakeholder forums
network similar to that of the national oil pipe network, but found third-party collaboration proposals were too high level and lacked detail		because they did not know what they were or how effective they would be. The environmental pilot projects also stood out because of the seemingly large price tag attached to them and some were put off by the costs. These participants were generally more receptive to the concept of environmental project plans when considering other examples of projects – but they still struggled a bit given that the projects potentially covered such a wide range of things. Overall, participants found it difficult to make decisions about prioritising the environmental projects because they didn't know what these projects would be and without this information they were unable to make assessments about how worthwhile the different levels of investment were. Those who were in favour of the proposals were so because they were willing to assume they would be	
		effective.	

2.36.3 Implications across the plan

Not applicable.

2.36.4 Assurance

Data table App1 and supporting commentary has been assured by Atkins.

2.36.5 Evidence

Table 73: Evidence to support the response to AFW.OC.A36

Appendix	Description
OC.A1.1	PR19 resilience & environmental bespoke commitments working group minutes (Nov 17)
OC.A1.4	Atkins Technical Assurance Report March 2019
OC.A36.1	Final dWRMP Report_V3_080618



2.37 AFW.OC.A37

2.37.1 Overview of test area action

Table 74: Action details for AFW.OC.A37

Action Ref.	Action
AFW.OC.A37	Environmental innovation - delivery of community projects PC: The company should provide further evidence to justify the use of an outperformance payment for this PC, including evidence of customer support. The company should demonstrate how this ODI will benefit customers. The company should also explain how it prevents double counting of benefits.

Nature of adjustment: action completed

2.37.2 Our response

The response to this action should be read in conjunction with AFW.OC.A36. We have responded to this challenge by amending this PC and ODI. Ofwat has challenged costs associated with the delivery of this PC in the IAP feedback. We have considered the challenge and will amend our proposals for our Revised Plan. We are proposing that this measure will be a reward-only ODI, in effect structuring the incentive in such a way as to enable us to recover the cover of delivering the projects following their successful delivery. We will take forward work to refine the specific design of each project in conjunction with our CCG as well as agreeing the process for review and sign off delivery of each project given the revised proposals for this PC. Our approach will mean that projects are developed so that there is no duplication and double counting of benefits from projects within our water efficiency programme of work.

2.37.3 Implications across the plan

There are small implications for the Revised Plan from responding to this action. In effect we can achieve outperformance incentives for delivery that only allow for the recovery of underlying costs. To this extent the PC and ODI do not provide the opportunity for outperformance.

2.37.4 Assurance

See section 2.1.4 above.

2.37.5 Evidence

Table 75: Evidence to support the response to AFW.OC.A37

Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019



2.38 AFW.OC.A38

2.38.1 Overview of test area action

Table 76: Action details for AFW.OC.A38

Action Ref.	Action
AFW.OC.A38	Environmental innovation - delivery of community projects PC: The company should provide further evidence to justify that the underperformance payment reflects the overall allowance for the schemes specified.

Nature of adjustment: action completed

2.38.2 Our response

We have responded to this challenge by amending this PC, see AFW.OC.A37. This PC will no longer include underperformance payments.

2.38.3 Implications across the plan

There are no implications for the Revised Plan from responding to this action.

2.38.4 Assurance

See section 2.1.4 above.

2.38.5 Evidence

Table 77: Evidence to support the response to AFW.OC.A38

Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019

2.39 AFW.OC.A39

2.39.1 Overview of test area action

Table 78: Action details for AFW.OC.A39

Action Ref.	Action
AFW.OC.A39	River restoration PC: The company should revise this PC to show that the profile of work is stretching.

Nature of adjustment: alternative approach

2.39.2 Our response



The profile and volume of work for AMP7 is far more stretching than the volume of work we have delivered in in AMP6 and is part of the accelerated WINEP programme developed in discussion with colleagues from the EA.

In AMP6 we are delivering morphological works (river restoration and habitat enhancement) on six rivers in Central region and one river in Southeast region. To date we have completed 8 projects, improving 4km of chalk rivers, with a further 8 projects to be completed in Year 5. Alongside our sustainability reductions programme this will contribute to the improvement of 108km of chalk rivers in AMP6.

Our AMP7 programme represents a significant increase in the number of projects that we will deliver over the five-year period. We are targeting the delivery of 36 projects by end of AMP7, more than double the 16 we will have achieved in AMP6. This is a step change in the number of projects contributing to the improvement of over 125km of rivers in AMP7 covering the Ver, Beane, Upper Lea, Mimram, Misbourne, Gade, Cam and Ivel.

2.39.3 Implications across the plan

There are no implications for the Revised Plan from responding to this action.

2.39.4 Assurance

See section 2.1.4 above.

2.39.5 Evidence

Table 79: Evidence to support the response to AFW.OC.A39

Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019

2.40 AFW.OC.A40

2.40.1 Overview of test area action

Table 80: Action details for AFW.OC.A40

Action Ref.	Action
AFW.OC.A40	River restoration PC: The company should provide further evidence to justify the use of an outperformance payment for this PC, including evidence of customer support. The company should demonstrate how this ODI will benefit customers.

Nature of adjustment: action completed

2.40.2 Our response

We have profiled the work across AMP7 based on our learnings from delivery of the AMP6 programme. We will be looking to undertake works in areas of public access for example parks or adjacent public footpaths, to maximise the benefits to customers and communities. Where there is currently no public access, as part of project design and delivery we will establish new access opportunities, for example through the creation of permissive footpaths.



Identifying and Delivering Customer Benefits through our Projects

The Environment Agency have provided information on the reach of rivers we are to deliver works on. The programme of works is then developed through walkover surveys and project identification. We are currently working with the EA to identify and prioritise works based for each river.

The AMP7 prioritisation process considers ecological benefit, feasibility of a scheme and direct and indirect benefits to customers. This will be achieved through assessing projects against an agreed set of criteria, which weights projects where there are additional recreational, access and/or educational benefits for customers.

We have also been working with local environmental groups for more than 25 years and understand their concerns and aspirations for chalk streams in their communities. We frequently attend local group meetings, presenting works on delivery of the AMP6 programme and discussing our plans. Conversations with customers and stakeholders at these events show they are supportive of this work.

Supportive Customer Feedback

We have received positive feedback from landowners, stakeholders, customers and community groups from the work we have completed to date. AMP6 work has included the removal or bypassing of structures (weirs), re-meandering of river channel, reconnecting the river to its flood plain and creating river side footpaths and installation of interpretation boards. We have completed works in both urban and rural settings to maximise the benefit to both the environment and communities across our supply area. We have also undertaken work within the grounds of a school, providing educational benefits and opportunity for the pupils to engage with monitoring and invasive non-native species management.

Delivering for the Environment and our Customers

The knowledge and experience of completing our AMP6 programme will enable us to deliver the greatest benefits to the environment, education, amenity, recreation and wellbeing for customers and communities. We will achieve this by working in collaboration with community groups and strategic partners, like the Herts and Middlesex Wildlife Trust and Chilterns Chalk Streams Project and building on our Revitalising Chalk Rivers initiative with the Environment Agency, through campaigns, educational programmes, raising awareness and targeted interventions through volunteering.

We will continue this work with our local communities and stakeholders in AMP7.

2.40.3 Implications across the plan

There are no implications for the Revised Plan from responding to this action.

2.40.4 Assurance

See section 2.1.4 above.

2.40.5 Evidence

Table 81: Evidence to support the response to AFW.OC.A40

Appendix	Description



OC.A1.4	Atkins Technical Assurance Report March 2019

2.41 AFW.OC.A41

2.41.1 Overview of test area action

Table 82: Action details for AFW.OC.A41

Action Ref.	Action
AFW.OC.A41	River restoration PC: The company should provide further evidence to justify the marginal benefits estimated from river restoration schemes, in particular that customers are willing to pay greater amounts for expedited scheme delivery and that this will deliver additional benefits to customers than otherwise would occur. It should also demonstrate that outperformance payments will not occur from normal reprofiling of schemes that could occur in the absence of an outperformance payment. The company should provide evidence to justify the 100 year time period used to estimate the environmental benefits delivered, in forming valuations of a delay to the proposed scheme.

Nature of adjustment: action completed

2.41.2 Our response

This response should be read in conjunction with AFW.OC.A40. All targets and marginal benefit valuations have been assessed by considering analysis carried out by the Environment Agency. We have used the EA water pollution natural capital calculator to value the change is state of a water body. The calculator estimates the value the public holds for improvements to rivers, lakes and other waterbodies such as reservoirs, canals. The calculator provides a range of guideline values recognising it is difficult to quantify the value people place on nature with a specific monetary value. The tool uses values based on loss felt by the public if a water body deteriorates and assumes that gain felt by an improved water environment is the same as the loss felt by a deteriorated water environment, however, loss is usually felt more highly than gain.

In addition to this analysis we have taken into consideration of recent customer research around the extent to which customers are willing to pay greater amounts to support the delivery of environmental schemes. Specifically, 'Sustainability Reductions', 'River Restoration', and 'Abstraction Incentive Mechanism' were the commitments which respondents were more likely to be prepared to pay an increase in their monthly water bill on the basis that Affinity Water exceeded their targets. This suggests that addressing environmental concerns is something that customers will be willing to pay a little extra for. River restoration was also a PC that customers were willing to pay extra for with 50% prepared to pay £1.23 extra and 52% are prepared to £0.46 extra.

We have introduced an outperformance cap at four projects above the cumulative target each year, protecting customers from any normal reprofiling of schemes that could occur in the absence of an outperformance payment.



We have applied 100 years to both under and over performance payments. This is based on the period over which these kinds of environmental work can deliver benefits based on average morphological lifetime project benefits.

2.41.3 Implications across the plan

There are no implications for the Revised Plan from responding to this action.

2.41.4 Assurance

See section 2.1.4 above.

2.41.5 Evidence

Table 83: Evidence to support the response to AFW.OC.A41

Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019
OC.A41.1	Desktop Review of Approach to Use EA CBA Analysis (Eftec)
OC.A41.2	PC ODI Incentive Testing – Final Report (Verve)

2.42 AFW.OC.A42

2.42.1 Overview of test area action

Table 84: Action details for AFW.OC.A42

Action Ref.	Action
AFW.OC.A42	Abstraction reduction: The company should provide further evidence to justify the use of an outperformance payment for this PC, including evidence of customer support. The company should demonstrate how this ODI will provide benefits that customers value.

Nature of adjustment: action completed

2.42.2 Our response

The programme of abstraction reductions included in our investment proposals are fully aligned with the relevant EA WINEP3 list. In addition, we have taken into consideration recent customer research around the extent to which customers are willing to pay greater amounts to support the delivery of environmental schemes. Specifically, 'Sustainability Reductions', 'River Restoration', and 'Abstraction Incentive Mechanism' were the commitments which respondents were more likely to be prepared to pay an increase in their monthly water bill on the basis that Affinity Water exceeded their targets. This suggests that addressing environmental concerns is something that customers will be willing to pay a little extra for. Our 'Sustainability Reduction' PC appears to be the area that customers are most willing to pay for an increase on their bills with 47% believing that £1.28 was a fairly or very acceptable



increase for exceeding targets and 50% found an increase of £0.44 acceptable should we exceed our target.

2.42.3 Implications across the plan

There are no implications for the Revised Plan from responding to this action.

2.42.4 Assurance

See section 2.1.4 above.

2.42.5 Evidence

Table 85: Evidence to support the response to AFW.OC.A42

Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019
OC.A41.1	Desktop Review of Approach to Use EA CBA Analysis (Eftec)
OC.A41.2	PC ODI Incentive Testing – Final Report (Verve)

2.43 AFW.OC.A43

2.43.1 Overview of test area action

Table 86: Action details for AFW.OC.A43

Action Ref.	Action
AFW.OC.A43	Abstraction reduction: Should the company propose to keep outperformance payments on this ODI then the company should set out and justify the timescales over which marginal benefits have been calculated for this PC. In addition to this the company should also provide further evidence to justify the marginal benefits estimated from the expedited abstraction reduction covered by this PC, in particular that customers are willing to pay greater amounts for this expedited delivery.

Nature of adjustment: action completed

2.43.2 Our response

This response should be read in conjunction with AFW.OC.A42. All targets and marginal benefit valuations have been assessed by considering analysis carried out by the Environment Agency using a timescale of 40 years for its assessment period. We have accepted this as the most appropriate timescale for analysis. We calculate the benefit for reducing the water we take from the environment by using the EA's Benefit Cost Ratio for Sustainability Reductions. To do this, we take the average of the benefit cost ratio in the Upper Lee and Colne area (1.76 and 1.29, so 1.52) and multiply the cost for the programme of abstraction reductions included in our investment proposals are fully aligned with the relevant EA WINEP3



list. This gives a benefit of £326,013.16 per ML/d reduction. We will be reviewing our valuation assessment once we have completed our additional customer research and expect to provide a further update to Ofwat on 24 May 2019.

In addition to this analysis we have taken into consideration of recent customer research around the extent to which customers are willing to pay greater amounts to support the delivery of environmental schemes. Specifically, 'Sustainability Reductions', 'River Restoration', and 'Abstraction Incentive Mechanism' were the commitments which respondents were more likely to be prepared to pay an increase in their monthly water bill on the basis that Affinity Water exceeded their targets. This suggests that addressing environmental concerns is something that customers will be willing to pay a little extra for.

2.43.3 Implications across the plan

There are no implications for the Revised Plan from responding to this action.

2.43.4 Assurance

See section 2.1.4 above.

2.43.5 Evidence

Table 87: Evidence to support the response to AFW.OC.A43

Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019
OC.A1.5	Verve Customer Research Report March 2019

2.44 AFW.OC.A44

2.44.1 Overview of test area action

Table 88: Action details for AFW.OC.A44

Action Ref.	Action
AFW.OC.A44	Number of sources operating under the Abstraction Incentive Mechanism: The company should provide further evidence that the grouping of sites into sources is the best option in terms of customer and environmental benefit. If the company cannot provide this evidence the definition should be amended to be based on the number of sites.

Nature of adjustment: action completed

2.44.2 Our response

We have discussed the reasoning behind grouping sources with a range of stakeholders, including Ofwat, since we started to operate AIM in the financial year of 2016/2017⁵. In

⁵ Please see Evidence Section 2.44.5.



summary, the core purpose of AIM is to encourage reduced abstraction at certain environmentally sensitive sources during low flow periods and as such it makes sense to group sources where they share a trigger as the best option to ensure the mechanism works as designed to achieve customer and environmental benefit.

Through this correspondence, there has been widespread acceptance of the benefits of operating AIM and that where several sources share a trigger, this is a sensible thing to do. The main reasons behind grouping sources are as follows:

- Due to the strategic locations of pumping stations and the aggregations on abstraction licences, it is common for sources close to each other to pump to meet the same demand or to fill the same reservoir. In resource terms, this means that the two sources effectively operate as one. Hence an outage at one can be met by increasing abstraction from another, providing resilience to the customer. We have a number of catchments where more than one source which operates in this way is included within the AIM.
- Without the grouping, a decrease in abstraction at one source could be substituted with an increase at an adjacent one (e.g. Bricket Wood and Netherwild) and although this would result in a good AIM score, there would be no net reduction in the volume of water abstracted from a catchment. The grouping ensures that the AIM score is reflective of reality and provides an incentive for the deficit to be met by other means, such as import, providing benefit to the environment.
- According to Ofwat guidance, the AIM baseline needs to be representative of the future. For most sources, this has been calculated as the average abstraction when flow at the relevant gauging station has been below the trigger point, from 1995-2015. The groupings allow for any variations in the demand on the grouped sources through time, ensuring that the 'combined AIM baseline' (the summed AIM baselines of the two sources) remains representative, providing resilience for the customer whilst maximising the opportunities to achieve a good AIM score, hence benefitting the environment. The reasoning behind the groupings and the calculation methodology of the AIM baselines is set out in our Annual AIM performance for the period 2017-2018.

We have taken into consideration recent customer research around the extent to which customers are willing to pay greater amounts to support the delivery of environmental schemes. Specifically, 'Sustainability Reductions', 'River Restoration', and 'Abstraction Incentive Mechanism' were the commitments which respondents were more likely to be prepared to pay an increase in their monthly water bill on the basis that Affinity Water exceeded their targets.

2.44.3 Implications across the plan

There are no implications for the Revised Plan from responding to this action.

2.44.4 Assurance

See section 2.1.4 above.

2.44.5 Evidence

Table 89: Evidence to support the response to AFW.OC.A44

Appendix	Description



OC.A44.1	Letter dated 23 April 2018 to Jon Ashley, setting out Affinity Water's AIM plans post April 2018, including the reasoning behind the groupings
OC.A44.2	Emailed recognition of letter dated 23 April 2018 from Jon Ashley
OC.A44.3	OFWAT query on the AIM- email from Jon Ashley
OC.A44.4	Follow up with of phone conversation from after AIM email from Jon Ashley, in which the groupings were discussed and subsequent note
OC.A44.5	Slides from OFWAT and water companies at workshop to discuss the future of AIM, on 17 April 2018
OC.A44.6	Minutes from AIM workshop on 17 April 2018
OC.A44.7	Annual AIM performance for the period 2017-2018

2.45 AFW.OC.A45

2.45.1 Overview of test area action

Table 90: Action details for AFW.OC.A45

Action Ref.	Action
AFW.OC.A45	Number of sources operating under the Abstraction Incentive Mechanism: The company should provide further evidence to justify the use of outperformance payments for this ODI and evidence of customer support for this approach. Alternatively the company could consider the use of an underperformance payment in order to sufficiently incentivise this outcome.

Nature of adjustment: action completed

2.45.2 Our response

We have now made this an outperformance and underperformance ODI, see App1, line 17, and App1 Table Commentary.

In addition to this we have taken into consideration of recent customer research around the extent to which customers are willing to pay greater amounts to support the delivery of environmental schemes. Specifically, 'Sustainability Reductions', 'River Restoration', and 'Abstraction Incentive Mechanism' were the commitments which respondents were more likely to be prepared to pay an increase in their monthly water bill on the basis that Affinity Water exceeded their targets. This suggests that addressing environmental concerns is something that customers will be willing to pay a little extra for. 'Abstraction Incentive Mechanism' was a commitment that customers were willing to pay extra for with 57% finding £0.67 an acceptable increase and 53% rating £0.50 as an acceptable increase.



2.45.3 Implications across the plan

There are no implications for the Revised Plan from responding to this action.

2.45.4 Assurance

See section 2.1.4 above.

2.45.5 **Evidence**

Table 91: Evidence to support the response to AFW.OC.A45

Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019
OC.A41.2	PC ODI Incentive Testing – Final Report (Verve)

2.46 AFW.OC.A46

2.46.1 Overview of test area action

Table 92: Action details for AFW.OC.A46

Action Ref.	Action
OC1.OC.A46	Mean Zonal Compliance (MZC): The company should remove MZC. If the company doesn't do this is should provide further evidence that customers support the provision of two very similar measures. Also see action AFW.OC.A1 as we expect the company to select the two PCs from the asset health long list that measure water quality contacts as also are reported on the Discover Water website.

Nature of adjustment: action completed

2.46.2 Our response

We have taken on-board the Ofwat feedback and have removed MZC as a PC. We have however kept this on as a KPI for our company.

2.46.3 Implications across the plan

There are no implications for the Revised Plan as the PC has been removed.

2.46.4 Assurance

See section 2.1.4 above.

2.46.5 Evidence

Table 93: Evidence to support the response to AFW.OC.A46

Appendix	Description
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OC.A1.4	Atkins Technical Assurance Report March 2019

2.47 AFW.OC.A47

2.47.1 Overview of test area action

Table 94: Action details for AFW.OC.A47

Action Ref.	Action
AFW.OC.A47	Number of occupied properties not billed (Gap sites): The company should reconsider its proposed percentage target for 2020-25. The company should clearly set out the evidence and rationale for the revised target.

Nature of adjustment: alternative approach

2.47.2 Our response

Our proposed Performance Commitment value of 50 gap sites per year is based on resolving our current caseload and expected new cases of suspected illegal connections by the end of the AMP7. Given the number of gap sites targeted we have not expressed this as a percentage target of connected properties. This measure will be expressed as number of sites only. To achieve the target, we will need to improve our approach and progress activities in cases of suspected illegal connections and or developments more rapidly than we do today. This PC and ODI provides further incentives to tackle the underlying issue of gap sites. Based on evidence of existing caseload and expected new cases of illegal connections we consider that a target of 50 gap sites a year will be challenging to achieve and we will incur underperformance payments if we do not achieve this. See AFW.OC.A48.

Achieving our target will require the elimination of any currently unresolved cases and importantly will require the resolution of new cases within shorter timescales than we currently achieve on average today.

2.47.3 Implications across the plan

There are no implications for the Revised Plan.

2.47.4 Assurance

See section 2.1.4 above.

2.47.5 Evidence

Table 95: Evidence to support the response to AFW.OC.A47

Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019



2.48 AFW.OC.A48

2.48.1 Overview of test area action

Table 96: Action details for AFW.OC.A48

Action Ref.	Action
AFW.OC.A48	Number of occupied properties not billed (Gap sites): The company
	should provide evidence to demonstrate that an outperformance
	payment would benefit customers and that it is designed in such a way
	that does not create perverse incentives with respect to the timely and
	accurate identification of gap sites.

Nature of adjustment: action completed

2.48.2 Our response

We have taken on-board Ofwat's feedback and have made this an underperformance-only ODI.

For further details see App1, line 19, and table commentary.

2.48.3 Implications across the plan

There are no implications for the Revised Plan.

2.48.4 Assurance

See section 2.1.4 above.

2.48.5 Evidence

Table 97: Evidence to support the response to AFW.OC.A48

Appendix	Description
OC.A1.4	Atkins Technical Assurance Report March 2019

2.49 AFW.OC.A49

2.49.1 Overview of test area action

Table 98: Action details for AFW.OC.A49

Action Ref.	Action
AFW.OC.A49	Number of occupied properties not billed (Gap sites): The company should provide evidence to demonstrate that an outperformance payment would benefit customers and that it is designed in such a way that does not create perverse incentives with respect to the timely and accurate registration of void sites.

Nature of adjustment: action completed



2.49.2 Our response

This refers to False Voids and is a duplicate of AFW.OC.A17. Please see section on AFW.OC.A17 for answer to the relevant point.

In terms of gap sites, our response should be read in conjunction with AFW.OC.A48. We have taken on-board Ofwat's feedback and have made this an underperformance-only ODI.

For further details see App1, line 19, and table commentary.

2.49.3 Implications across the plan

There are no implications for the Revised Plan.

2.49.4 Assurance

See section 2.1.4 above.

2.49.5 Evidence

Not applicable



3 Appendices

All the appendices listed below for this evidence document are included in the appendices titled AFW Delivering Outcomes for Customers Appendix.

Table 99: Full summary of Delivering Outcomes for Customers appendices

Appendix	Action ref(s)
OC.A1.1 PR19 resilience & environmental bespoke commitments working group minutes (Nov 17)	AFW.OC.A1, A2, A3, A36
OC.A1.2 CCG update on bespoke commitments (13 Dec 17)	AFW.OC.A1, A2, A3
OC.A1.3 PR19 SteerCo: Bespoke Commitments Resilience Paper (Feb 18)	AFW.OC.A1, A2, A3
OC.A1.4 Atkins Technical Assurance Report March 2019	AFW.OC.A1, A2, A5, A6, A7, A8, A9, A10, A11, A12, A13, A14, A15, A16, A17, A18, A19, A20, A21, A23, A24, A25, A26, A27, A28, A29, A30, A31, A36, A37, A38, A39, A40, A41, A42, A43, A45, A46, A47, A48
OC.A1.5 Verve customer research report March 2019	AFW.OC.A1, A12, A43
OC.A1.6 Cyber Security and Resilience PC Definition	AFW.OC.A1
OC.A2.1 Ofwat, "Delivering Water 2020: consultation on PR19 methodology, Appendix 3: Outcomes technical definitions", 11 July 2017	AFW.OC.A2
OC.A3.1 Supplementary report to Ofwat from the Affinity Water Customer Challenge Group (29 March 2019)	AFW.OC.A3, A33, A35
OC.A4.1 Ofwat, "Technical Appendix 1: Delivering Outcomes for Customers" Jan 2019, page 28	AFW.OC.A4, A10, A13, A14, A15, A20, A23, A25
OC.A11.1 rdWRMP Atkins report	AFW.OC.A11, A19
OC.A11.2 NERA Economic Consulting - Assessing Ofwat's Funding and Incentive Targets for Leakage Reduction	AFW.OC.A11
OC.A12.1 Leakage customer engagement evidence	AFW.OC.A12
OC.A19.1 Drought resilience metric: intermediate calculation outputs	AFW.OC.A19
OC.A32.1 SMS feedback analysis (PC2)	AFW.OC.A32, A34
OC.A32.2 Financially vulnerable by channel (PC1)	AFW.OC.A32, A34
OC.A32.3 SMS Example process flow chart for satisfaction and ease	AFW.OC.A32, A34



OC.A32.4 MRS research guidelines	AFW.OC.A32, A34
OC.A32.5 Application of MRS research guidelines to our PCs	AFW.OC.A32, A34
OC.A32.6 Framework for BSI 18477	AFW.OC.A32, A34
OC.A36.1 Final dWRMP Report_V3_080618	AFW.OC.A36
OC.A41.1 Desktop Review of Approach to Use EA CBA Analysis (Eftec)	AFW.OC.A41, A42
OC.A41.2 PC ODI Incentive Testing – Final Report (Verve)	AFW.OC.A41, A42, A45
OC.A44.1 Letter dated 23 April 2018 to Jon Ashley, setting out Affinity Water's AIM plans post April 2018, including the reasoning behind the groupings	AFW.OC.A44
OC.A44.2 Emailed recognition of letter dated 23 April 2018 from Jon Ashley	AFW.OC.A44
OC.A44.3 OFWAT query on the AIM- email from Jon Ashley	AFW.OC.A44
OC.A44.4 Follow up with of phone conversation from after AIM email from Jon Ashley, in which the groupings were discussed and subsequent note	AFW.OC.A44
OC.A44.5 Slides from OFWAT and water companies at workshop to discuss the future of AIM, on 17 April 2018	AFW.OC.A44
OC.A44.6 Minutes from AIM workshop on 17 April 2018	AFW.OC.A44
OC.A44.7 Annual AIM performance for the period 2017-2018	AFW.OC.A44