

Resilience consultation  
Ofwat  
City Centre tower  
7 Hill Street  
Birmingham  
B5 4UA

**28 August 2015**

Dear Sirs,

### **Reliable services for customers – consultation on OFWAT’s role on resilience**

We welcome the consultation document, ‘Reliable services for customers – consultation on Ofwat’s role on resilience’, and the opportunity it gives for us to contribute to how Ofwat will take forward its new primary duty to further the resilience objective. There is much in the publication that we welcome and support.

We have structured our response in two parts. Firstly we have set out our general comments and observations regarding resilience. The second part of our response sets out our views on the issues presented in the consultation and answers to the specific questions raised therein.

In addition to our response we have included summary material, attached as an appendix, from recent focus groups we have undertaken to find out what customers understand by the term resilience in the context of their water supplier.

### **General comments**

We fully support the resilience duty and are encouraged to see how this is influencing Ofwat’s thinking in the context of future developments of regulatory framework, as subsequently shown by your Water 2020 discussion papers. We think it is essential to clarify how the regulatory framework can be developed so as to ensure the long-term resilience of water and sewerage systems and services. This is especially important given the growing importance of customers in establishing the service levels they expect now and into the future under all operating conditions.

We appreciate a broad interpretation of all of Ofwat’s duties could be characterised as “*encouraging service providers to do more for less and make better use of resources*”. While we fully recognise the ongoing challenge to improve efficiency, as illustrated by our commitment to finding over £100m of efficiencies in our AMP6 plan, we think it could be presumptuous to assume that improvements in productive, allocative and dynamic efficiency will always mean doing more for less. Many of the issues in the document, perhaps most notably population, climate change and sustainability pressures, will require significant changes in industry thinking and may also require increased investment.

There are a number of aspects of future resilience that we think could significantly influence water companies' performance and should be considered within the development of regulatory incentives for the next price review and beyond. We discuss some of these below.

#### *Cross-company approaches*

Future developments and challenges will increasingly require regional and cross company approaches. Additionally we will need to explore cross sectoral approaches. Increasing resilience to present and future shocks cannot be achieved in isolation, we need an integrated approach made up of both demand-side and supply-side measures across companies under a wide range of circumstances. There is a question as to whether the current 5 year price review and business plan approach is sufficient to promote and incentivise this thinking across all companies. Our own PR14 business plan anticipated a 10 year investment plan.

We are concerned about the sector's capacity to cope with risks impacting on multiple sites, for example, catchment wide flooding or co-ordinated terrorist activities. Such 'low probability high consequence' events are likely to be underestimated by standard assessment tools. Our recent experience at Egham shows that there are likely to be clear upper limits to the assistance that can be expected from Mutual Aid. We are working with other companies in the Southeast on this issue.

#### *Bottled water*

It is likely that for the very largest events, such as recent floods and those experienced in 2007 that insufficient logistical capability exists within the water industry to provide alternative water supplies for extended periods. More generally we think that customers rising expectations could mean that the provision of bottled water as an alternative supply could become unacceptable in a modern first world economy. This could have significant implications for all water service providers and the systems required to deliver such a step change in customers' expectations. We have raised this issue with Water UK for consideration.

#### *Resources and catchments*

We believe future issues around resilience will be dominated by underlying resources at the level of the catchment. This will require cross sectoral approaches, as mentioned earlier. It also means that cross company and inter company approaches will be required. This could have significant implications for customers, by catchment and underlying resource, should moves towards cost reflective tariffs continue to be promoted and incentivised by the regulatory framework. We would expect to see greater convergence between water resource plans, drought plans, emergency plans and business plans as well as greater emphasis on the work and findings from partnerships such as the Water Resources South East (WRSE) and Water Resources East Anglia (WREA). It is critical that the development of the price setting framework for PR19 achieves an effective balance between collaborative initiatives and competitive market based solutions.

#### *New investment for large scale infrastructure*

We expect population, climate change and sustainability pressures may require increased investment. This could be delivered most effectively by large scale infrastructure that is both cross company and cross sectoral. It will be essential that integrated planning is incentivised to enable such schemes and consideration should be given to how these can be dealt with either within the price setting methodology or as a separate exercise.

### *Water treatment deconstruction*

We think an approach to increase resilience could be developed in relation to water treatment and distribution. There may well be merit in enabling the development of partially treated water distribution at a strategic nodal level. This could introduce a degree of additional flexibility to improve resilience and avoid the all or nothing approach which currently distinguishes between raw or fully treated water. This could have implications for water treatment plant with specialised treatment processes at a cross company regional level.

The remainder of our response answers to the specific questions raised in the consultation.

### **Comments against Ofwat's questions**

*Q1. Is our basic understanding of resilience aligned with your own – are we addressing the right things in the right way?*

We think that your understanding of resilience is aligned with our own. We think the working definition set out in section 1.3 (*"Resilience is the ability to cope with, and recover from, disruption, trends and variability in order to maintain services for people and protect the natural environment, now and in the future."*) is helpful and should be strengthened by the adoption of the wider Cabinet Office framework under the guide of 'Keeping the Country Running'.

We use the categorisation of resilience delivery, included in the Cabinet Office guide, to inform our operations and approach to resilience. This categorises resilience issues as:

- Resistance;
- Redundancy;
- Reliability;
- Response/recovery

We have looked at our own business through the lens of these four categories, and also compared how the water industry stacks up against other network based regulated utilities. We believe that the least well developed category is 'redundancy'. The electricity industry's use of mothballing and interconnectors would be a useful comparator. It might be useful to consider how Ofgem has enabled redundancy and if there are any lessons for Ofwat's future price setting methodology.

We have some capacity for start up in the event of a drought, such as peak period licenses, and some limited mothballed assets. As abstraction licenses are withdrawn or reduced, population grows and climate change escalates, we think that redundancy could be expanded. For example, we have major assets that could be mothballed rather than decommissioned following sustainability reductions and we are investigating these options with the Environment Agency. The case for mothballing kit for use in major droughts is worth examining as well as how this can be supported through the future regulatory framework.

The Cabinet Office guide emphasises the need for a cycle of identifying and assessing risk, building resilience and evaluation, as set out below.



We think this approach could be useful addition to the principles outlined in section 4 of the publication and could be developed to provide a diagrammatic representation of all 10 principles which we support.

One of the principles outlined, Principle 4 – customer views at the heart, is of particular interest to us. We are exploring how best customer views can be elicited. Case studies, such as our recent Egham incident, are valuable in helping to present resilience and service consequences as more than an academic exercise. We attach an Appendix summarising our recent focus group research, carried out in August 2015, on baseline customer perception of resilience. The research provides some very helpful customer feedback and illustrates some of the challenges around engaging with customers on such a broad topic.

Ofwat's focus on intergenerational issues is helpful. Today's customers may excessively discount medium to long term risks. We therefore welcome and support the references in the Water 2020 discussion documents to considering how other deliberative tools may enable better informed customer choices, for current and future generations. It is possible that avoided cost as well as willingness to pay stated preference research may offer insight to customer needs.

*Q2. Do you agree with our view of what OFWAT should deliver, including where we might step in, and what is for others to deliver?*

We agree that Ofwat has no responsibility for the practical delivery of resilient water and sewerage services and it is for companies to understand their risks and manage them accordingly. Companies and service providers should be responsible for delivering, assessing and reporting on resilience. While we can see a role for Ofwat in monitoring company and service provider performance it is dependent on Ofwat setting out how it will monitor the achievement of resilience and if consensus can be achieved around measurement (see Q3).

We welcome and strongly support the recognition that resilience will be a key component of Water 2020 and a theme for AMP7. As discussed earlier, we can see there are some substantial challenges in developing the regulatory framework to achieve the optimal balance of incentives underpin cross company and regional resilience including innovative approaches with third parties across multiple sectors.

*Q3. What views do you have on how the water and wastewater sector might measure its performance in delivering resilient services – and the best way for us to demonstrate that we are carrying out our role?*

Direct measures of resilience are not easy to create but we think that it should be possible to assess resilience from a range of performance measures, including performance commitments made by companies at PR14. We think Ofwat is best placed to understand the overall resilience of the sector. It seems to us, as the Cabinet Office guidance suggests, that running exercises and scenarios to evaluate system and intercompany resilience, and then building the results of such exercises into readiness could be a valuable component of an overall assessment and we have been working with Defra in this area.

There is a clear analogy here with the document's comments about financial resilience and gearing: the best approach would seem to us to be proper company evaluation (e.g. through rating agencies) rather than general and non situation-specific approaches to gearing.

Yours sincerely,

A handwritten signature in blue ink, appearing to read "C Offer", written over a light blue horizontal line.

**Christopher Offer**  
**Director of Regulation**

## Appendix A: Resilience Customer Understanding Research

### Objectives

- To gain an understanding of what Affinity Water customers' understand by resilience and if they have an awareness of what resilience means in the context of their water supplier.
- To investigate their views on who should be responsible for ensuring resilience in the system and how success, or failure, should be measured in achieving it.

### Methodology

Two qualitative focus groups (8 respondents per group, 1½ hour duration) were held in two locations on 20<sup>th</sup> August 2015: –

- Egham – This location was chosen as there had been a recent water supply issue
- Hatfield – a similar demographic to Egham and had not had any recent water supply issues

Respondents were recruited to the following criteria:

- Affinity Water bill payers
- Personally responsible for paying the bill (even if set up on a direct debit) and have the bill in their name (or joint names)
- On a water meter
- Were aware of a problem with the local water supply in Egham area (Egham group only) / not aware of any problems with the local water supply (Hatfield group)
- Aged 18–65, in each group spread of gender and mix of life stages / social class

### Findings

- Water is essential to people's lives and not just in a physiological sense but also on a broad lifestyle axis. It is an important element to their lives and to some extent they take it for granted and it is considered a given.
- The perception is that the frequency and impact of incidents affecting the water supply are very rare. Even in Egham, where there was a recent problem (July 2015), this was the first remembered for most of the respondents in the last couple of decades.
- The primary elements that customers value in their water supply are availability (reliability) and quality – “delivery of quality water to my home when I need it”.
  - Availability – having a ready and immediate supply of water when required.
  - Quality – having good quality water – safe, clean, not contaminated, looking pure and tasting OK.

- There was a tacit understanding that to achieve the above that there had to be a strong infrastructure of water cleansing processes and facilities and an integrated well maintained pipe network to get the water to users.
- All recognised that ongoing investment was needed in the infrastructure to achieve a continued reliable water supply. Although as water supply issues are rare there was an unspoken feeling that the level of investment must be about right, however they did recognise that a full and proper review of risk mitigation and the associated investment plan should be undertaken.

### **Meaning of resilience to customers in the context of water supply**

- Resilience of the supply of water was recognised through the course of the discussion and as identified previously, as a potential major concern for customers. Whilst they did not necessarily use the term resilience, preferring – ‘availability’ or ‘reliability’ of supply instead, they expressed sentiments that showed that the ongoing supply of good quality water was a key requirement for them.
- Effectively ‘resilience’ for customers comes down to the integrity (trust / confidence) of the water supply infrastructure (the pipes, decontamination plants / processes etc.).
- As previously mentioned there is an underlying concern regarding the longer-term water supply and a recognition that the system will come under increased burdens in future. This effectively means that they expect an ongoing review of the infrastructure / system to identify any potential risks and the associated analysis of these risks to determine the appropriate investment programme to mitigate these risks.
- There was an understanding that even with all of the planning in the world that problems in the system are likely to occur. However these problems should be kept to a minimum in terms of frequency and impact / coverage. When a breakdown in the system does occur they expect a swift and efficient response from water companies, with ongoing communications and updates on progress towards resolution of the problem.
  - All agreed that taking responsibility for the problem and apologising for the inconvenience, whilst explaining the circumstances and how the problem will be resolved in the short or longer term, were the right courses of action. For the most part this was felt to have been achieved by respondents in the Egham situation.

### **Responsible for ensuring water network resilience**

- Some form of ‘Government’ is also thought to be involved although this is less clear within respondents’ minds. Some talk about central Government (e.g. DEFRA), others local authorities and some talk about an industry regulator, with some naming Ofwat.

- Unlike other utilities such as gas, electricity or rail, it is thought that there is no infrastructure partner and hence the role of infrastructure maintainer falls by default to the water companies (although respondents were not overly confident on this assumption).
- Government in its widest context (central, local and Ofwat) was thought to be responsible for building assessing the national infrastructure plan and preparing an investment plan accordingly. When probed Ofwat seems the most appropriate body to set and implement the plan but with consultation and influence from central Government.
- Funding responsibility for any infrastructure investment plan was more difficult for respondents to identify. Most felt this was likely to be provided by either:
  - Central Government (taxpayer) could be a primary source for any major infrastructure upgrade.
  - Or the water companies, who it was felt had responsibility for the infrastructure in their area. Although if the infrastructure upgrade was required on a wider geographical area (across several water companies areas) or national coverage then the situation becomes less clear.
- Ultimately customers thought that the water companies had responsibility for implementing any infrastructure upgrades or maintenance but that the plan or review of infrastructure requirements would be set by Government / Ofwat perhaps with consultation with the water companies.
- It was recognised that measurement of resilience would be difficult to achieve and that it effectively would be a review of the efficiency of the infrastructure. Their thinking is that if the water supply system was operating perfectly, all water customers would be able to access water at any point in time. Hence, measurement would be failure rate i.e. % who are without safe / drinkable water at any given point in time.
- Efficiency of water use was felt by a minority to impact on the resilience of the water supply and hence theoretically should be managed. For most this was not at the forefront of their minds but once discussed it was felt it could be a significant factor for the future, although most felt that increased supply could solve this or they are choosing to ignore the issue. It was thought that all elements of the water industry had a responsibility for communicating and informing users of best practice and the issues.
  - The water companies have an obvious responsibility in their area and with their particularly geographical, demographic and demand circumstances, however it was thought that this was a national issue and may require a broader and ongoing communication from Government.