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Consultation on Ofwat's new role in resilience - response from the Adaptation Sub-Committee of the Committee on Climate Change

The Adaptation Sub-Committee of the Committee on Climate Change has statutory duties under the Climate Change Act to advise Ministers on assessing the risks to the UK from climate change and to report to Parliament with an independent assessment of progress being made with adaptation.

The resilience of the water sector is vital to climate change adaptation in the UK. Our response to each of the three questions in the consultation document is set out below.

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

In our view, the definition of resilience in relation to the water and wastewater sector should cover two aspects:

1. Continuity of services to customers during periods of severe weather, taking in to account critical dependencies on other networks (particularly power, transport and ICT).
2. Maintaining long-term security of supply to customers, given pressures on both supply demand resulting from population growth and climate change.

The working definition of resilience in the consultation document appears to be attempting to cover both aspects above, in that it refers to coping and recovering from "disruption" (the first

aspect) as well as "trends and variability" (the second aspect). In that respect, we agree with the distinction being made that resilience is not just about coping with short-term and immediate disruptions, but maintaining a service in the long term.

Maintaining security of supply requires a long-term approach to water resources management, to make sure sensible adaptation options are being considered and the full extent of potential supply-demand deficits can plausibly be managed. In our view, an approach to resilience should include the use of *adaptation pathways* as a way of taking forward these longer-term studies - to identify options and lead times for the full range of potential supply- and demand-side measures that may be needed. Adaptation pathway approaches to water resources planning are starting to be developed by some service providers. In our view they should be further encouraged as part of the sector's developing approach to resilience.

In summary, we would agree that the basic understanding of resilience as set out in the consultation document and working definition is broadly in-line with our own understanding of the term, in relation to the water and wastewater sector. However, we suggest that the precise wording of the definition is looked at again, as it is not all that clearly written. For example, it could be questioned how is it possible to "cope and recover" from a trend?

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 it would not be appropriate or indeed effective for Ofwat to mandate a single approach to resilience across the sector. As is stated in the consultation document, this would be likely to turn resilience into a 'do the minimum' compliance issue for service providers.

However, from a reputational perspective we expect that Ofwat will want to make sure that the industry is meeting basic levels of resilience that might be expected of service providers. As set out in the consultation document, this will require Ofwat to "set expectations" for the sector about resilience and be ready to "step in" when they are not met. We suggest that taking forward the following actions would enable Ofwat to be able to deliver this role.

- As a minimum, develop data collection and reporting standards so that the different aspects of resilience can be measured and monitored in a meaningful and consistent way (see Q3 below for more detail). As well as company risk assessments and investment plans, data should be made available regarding system performance when under stress (during actual outages as well as near-misses). Reports and datasets should be made freely available for external scrutiny.

- Facilitate the development of common industry standards for resilience. This ensures that best practice and innovation is shared and exploited and the costs of resilience minimised. A good example of this was the development of an industry-wide standard to assess flood risk to electricity transmission and distribution assets (ETR138), which was a joint effort between the industry and regulator.
- Checking that companies are making sensible cost/resilience trade-offs in their business plans, so that Ofwat can evidence how it is fulfilling its resilience duty.
- Reviewing performance management arrangements to make sure incentive structures promote resilience, and that severe weather events are not treated as 'acts of god' during which times reward/penalty mechanisms are not applied.
- Satisfying itself that general expectations for levels of resilience are being met, for example that services will not be disrupted by a 1-in-200 year flood (Pitt Review, Cabinet Office), or droughts of a specified magnitude can be accommodated.

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?

As highlighted in response to Q2 above, in our view there is a need to develop consistent and transparent sector-wide data collection in order to be able to measure and report performance on resilience as a way of evidencing that the duty is being fulfilled.

The ASC has been considering the sorts of indicators that could be used to assess progress with resilience to climate change across a range of infrastructure sectors. These indicators have been used to inform the ASC's assessment of progress with the implementation of the National Adaptation Programme. The Committee's first statutory progress report was laid before Parliament in June 2015 and the full list of indicators identified is available on our website at: https://www.theccc.org.uk/publication/reducing-emissions-and-preparing-for-climate-change-2015-progress-report-to-parliament/

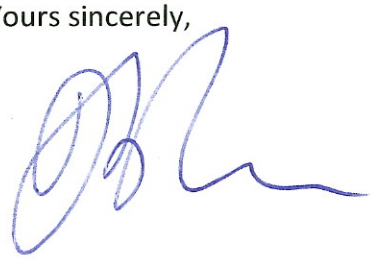
In relation to water and wastewater, despite close liaison with representatives of the sector, we were not able to identify many existing datasets that could be used to assess progress with resilience at a national level. The only quantitative data obtained related to average water consumption, uptake of metering, and levels of leakage. In our view, a wider range of data is required to be able to measure progress with resilience, including (but not limited to):

- Number of customers reliant on a single source of water for their supply.

- Number, duration, and root cause of each type of service impact (eg. water restrictions, temporary loss of service, sewer flooding).
- Probability of service interruptions under a benchmark set of future 'stress test' conditions.
- Residual risk of service interruption due to assets being located in areas of high flood risk.
- Investment in resilience measures by service providers (amount and timing of investment, and change in performance delivered as a consequence of that investment).
- Condition and capacity of public sewer infrastructure.
- Delivery of retrofit sustainable drainage systems, including permeable paving.

We would, of course, be willing to work closely with Ofwat and the sector to further develop approaches to such data collection in the future.

Yours sincerely,



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