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Trust in water

National Infrastructure Commission

The National Infrastructure Assessment – Process and Methodology':
Consultation response from Ofwat

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Introduction

Ofwat is the economic regulator for the water and wastewater services in England and Wales. We are a non-ministerial government department and oversee licensed private companies delivering water, sanitation and drainage services. We ensure that companies deliver services efficiently and with regard to the resilience of systems and services, and ensure that they put customers at the heart of their work.

As a regulator, an important part of what we do is to set limits on the prices of monopoly services. We also use markets to help allocate resources efficiently and to enable and encourage service providers to find new and better ways of doing things. Together, markets and regulation enable us to ensure delivery of better outcomes for customers and society.

We welcome this opportunity to comment on the National Infrastructure Assessment Process and Methodology, and we look forward to continuing a productive and collaborative working relationship with the commission.

The main points we would make are:

1. We are pleased that the proposed process and methodology intend to work in combination with existing planning/financing processes for water and wastewater services.

We believe our role as an independent economic regulator remains vital to the provision of affordable, resilient and sustainable infrastructure in relation to water and wastewater services. Paragraph 68 makes reference to 'changes to regulatory or market structure' as options for cost-effective infrastructure. Given the timescales for our Water 2020 programme, market development and the planning to inform the next Periodic Review for water and wastewater services we would ask that the commission clarifies its support for these process early to avoid uncertainty. We have committed to providing the methodology statement for our next price review for consultation by July 2017, and so anything that would affect this would need to be clear well in advance of the date or risk injecting uncertainty into the price review process.

2. We note that the NIC's approach attempts to take a broad view of the demand for infrastructure services. In driving a customer-centric view of water services, we have sought to ensure that companies focus on their customers and do so in a way that is not narrowly restricted to the customer as consumer of water services, but also as a citizen who cares for the environment and the longer term. However we do link this back to the fact that under present system, it is the present customer that pays the bill. We believe that our approach could have wider relevance for the NIC as it develops its approach, and we would be happy to discuss.

We think it is vital that the work of the commission builds on this customer focus, and the legitimacy it brings. There is a risk that infrastructure providers and their investors could interpret the NIC analysis as being a top-down approach, rather than one which builds on the vital role of customer engagement and involvement in decision making. It is therefore important that the NIC focuses on strategic direction to national infrastructure planning rather than local service provider plans.

3. Similarly, we think the approach should consider risks and who bears them as well as costs in a narrow sense. A particular scheme may be low cost, but that maybe because customers are bearing a lot of risk. This may mean that the commission cannot do its cost benefit analysis without taking a view on risk allocation and, to an extent, on financing arrangements. At the very least it will need to make clear its assumptions. We do have experience, especially in relation to the recent Thames Tideway Tunnel project, of different approaches to risk allocation and their impact on financing costs. Using an innovative approach to allocation of risk between investors, companies and government, Tideway secured one of the lowest ever financing costs for an infrastructure project. We would be happy to discuss this further.
4. The process and methodology makes no direct reference to Wales and the devolved aspects of water and wastewater services. We regulate England and Wales and water policy is largely devolved. It will be important that the distinction between the approaches in both countries is recognised in the work of the commission that addresses the water sector. This will be particularly important if options to transfer water resources across the political boundary were to be considered.
5. We are very pleased that the process and methodology recognises that infrastructure assets also include natural assets such as rivers and flood plains (para 39). For water and wastewater services the role of green/soft infrastructure is becoming increasingly important and relevant to ensure infrastructure solutions are resilient and sustainable to a wider range of possible futures, as well as to ensure cost-effectiveness over the long term.
6. Similarly, although we are very pleased to see the process and methodology recognising the challenge of climate change mitigation, it is not clear that it equally recognises the role and challenges related to future infrastructure for

adaptation. In this regard we would encourage the commission to consider 'adaptive management' approaches to infrastructure planning (such as the Environment Agency's Thames Barrier 2100 project) to provide the framework for flexible/adaptive infrastructure delivery.

7. We believe that one of the biggest opportunities for the commission to provide additional benefits will be its multi-sector approach. This is likely to be particularly important with respect to delivering both value for money and resilience. We are aware that strong interdependencies exist across sectors related to water, wastewater and drainage services, particularly with energy and food. We are equally clear, however, that sector-based planning approaches for infrastructure may mean that some significant opportunities may not have been realised. The commission may be aware, for example, that in the recent guidance issued to water companies on their water resources management planning process, (in England co-authored by us, DEFRA and the Environment Agency and in Wales co-authored by us, Welsh Government and NRW) we have set a clear expectation that companies will look beyond their own boundaries and indeed beyond the traditional public water supply in finding the best value water resources.

Our replies to the individual questions below focus on those with most importance to our ongoing work. We would welcome the opportunity to discuss with you, and with the commission, how the responses we have made can be taken forward.

Responses to questions

Q1: The Government has given the National Infrastructure Commission objectives to:

- foster long-term and sustainable economic growth across all regions of the UK
- improve the UK's international competitiveness
- improve the quality of life for those living in the UK

What issues do you think are particularly important to consider as the Commission works to this objective?

We would urge that the commission gives particular consideration to both customer value and resilience. In assuming customers will pay (either through water bills or taxation), it is important that future infrastructure requirements provide a valued benefit which is affordable.

We very firmly believe that the engagement of customers in the most recent water periodic review (PR14) was a significant step forward in terms of getting the best result for customers, and driving real innovation in the water sector. This view is supported by independent consumer bodies such as the Consumer Council for Water. We took this approach deliberately to get away from a tendency in the sector to work to the regulator, not to the customer. This also helped the sector to focus on the long term needs of customers, including resilience, rather than being led by top-down plans. In turn, by focusing on what customers want and are willing to pay for, the industry is able to increase its legitimacy.

Choices about resilience will impact not just customers but also the UK's international competitiveness. Confidence in the provision of water and wastewater utilities has the potential to impact inward investment. A range of potential shocks could impact continuity of water and wastewater services. Our recent work ([Towards resilience: how we will embed resilience in our work \[Dec 2015\]](#)) has shown that cost effective resilience planning is complex, involving a wide range of interdependences within the sector and across sectors.

Customer legitimacy of the sector, and our independent regulation, also help underpin investment in the sector, and we would note that this is particularly important in uncertain times.

Q2: Do you agree that, in undertaking the NIA, the Commission should be:

- Open, transparent and consultative
- Independent, objective and rigorous
- Forward looking, challenging established thinking
- Comprehensive, taking a whole system approach, understanding and studying interdependencies and feedbacks?

Are there any principles that should inform the way that the Commission produces the NIA that are missing?

We support these principles. We would suggest that the commission might also reflect other priorities such as reducing the regulatory burden.

Q3: Do you agree that the NIA should cover these sectors in the way in which they are each described?

Yes, we support the NIA covering these sectors, although it might help to describe the water sector together as 'water, wastewater and drainage'. Currently wastewater appears as an add-on, but wastewater services are relied on equally to water services by customers in the sector and, especially in the face of climate change and increasing development, face considerable challenges.

Q4: Are there particular aspects of infrastructure provision in these sectors which you think the NIA should focus on?

Under water, wastewater and drainage we would suggest an explicit reference to natural infrastructure would be useful given the scale of opportunities presented by green/soft infrastructure options, distributed infrastructure and demand-side solutions in combination with more traditional water company-owned fixed assets.

Q5: The NIA will seek to pull together infrastructure needs across sectors, recognising interdependencies. Are there particular areas where you think such interdependencies are likely to be important?

Water services as well as wastewater and drainage services have a range of links with other sectors. The highest profile links for water are generally with energy and agriculture (food). However, a wider range of opportunities and interdependencies exist beyond these such as the role of networks for customer infrastructure, smart metering interoperability, demand management and flood risk management.

The role of markets is likely to be particularly important with regard to an integrated infrastructure approach. Our recent work as part of our 'Water 2020' programme provides a useful example ([Water 2020: our regulatory approach for water and wastewater service in England and Wales \[May 2016\]](#)). For both water resources and bio-resources, markets are being introduced for elements of the value chain where there is scope for new players and different approaches to drive down costs, encourage innovation and make better use of scarce resources and existing assets. The process of introducing these markets will shine a light on the current regulated cost base. The wholesale network infrastructure controls continue for the bulk of the pipe and treatment work assets, but the markets at either end of the value chain will help to ensure that the regulated monopoly investment is targeted better. For major investments in the regulated monopoly network (with whole-life totex value above £100m), we have said that companies have to consider explicitly how these schemes are best delivered by market testing the approach to delivery, operation and financing. We also require information on company's plans and the evidence

underlying them be published, which should provide useful information for the National Infrastructure Assessment.

Q6: Do you agree that the NIA should focus on these cross-cutting issues?

We very much support the cross-cutting issues highlighted in the consultation. We would, however, like to see the approach taking more of an outcomes, rather than output approach. The shift in recent years from an outputs to an outcomes focused approach for the water sector has enabled the sector to deliver enhanced services to customers and value for money through the freedom to innovate. This approach has been particularly effective for infrastructure investment with a shift away from traditional, often less resilient solutions, to a far wider range of interventions types providing higher value to customers and society.

Q7: Are there any other cross-cutting issues that you think are particularly important?

Climate change adaptation and mitigation are cross-cutting issues which are likely to enhance important interdependencies between sectors. The energy/water nexus is a useful example, not just with regards energy/water generation but also the carbon footprint of water use and opportunities for combined demand management approaches.

Q8: Do you agree with this methodological approach to determine the needs and priorities?

The remit and ambition of the NIA are considerable and we would again encourage that the commission seek to work with and utilise existing approaches as much as possible. Although pleased to see that the approach will include the commission developing its own simple models we would ask that transparency will be important, some aspects of infrastructure planning can be simplified but others aspects cannot if suboptimal planning is to be avoided.

We would particularly ask the commission to look at the markets and incentive framework approach being operated in water. We believe this approach is already leading to more resilient, sustainable and cost effective infrastructure development and has still further potential.

We agree with the assessment and role of scenarios. We face a range of plausible futures and scenarios can be a useful and effective tool to help with an adaptive management approach. Related to this the water sector is increasingly using Robust Decision Making approaches for future water resource planning due to the complex nature of long-term investments under deep uncertainty. We would suggest the NIA should include the use of these emerging, more sophisticated, decision support systems.

Q9: Do you have examples of successful models which are particularly good at looking at long-term, complex strategic prioritisation in uncertain environments?

Due to the long-term nature of water resource management the sector has taken a long-term approach to planning. The baseline planning period for the statutory process of Water Resource Management Plans is 25 years, the current WaterUK national water resource assessment is for 50 years and the Environment Agency/Ofwat Case for Change assessment (2011) looked out 50, 80 and 100 years in terms of pressures and gaps between supply and demand.

For wastewater the planning approach has previously been less structured or long-term. However, the new 21st Century Drainage project represents an important step change, the project will undertake a long-term strategic review of wastewater infrastructure planning which should add greatly to the evidence base.

The Environment Agency approach on 'Long term investment scenarios for flood risk management' also provide a very useful model for infrastructure investment.

Q10: Do you believe the Commission has identified the most important infrastructure drivers (set out below)? Are there further areas the Commission should seek to examine within each of these drivers?

Yes, we agree these are the most important infrastructure drivers.

Q11: The NIA will aim to set out a portfolio of investments that best meets the demands of the UK in the future. Do you have a view on the most appropriate methodology to determine that portfolio?

With regard to water, wastewater and drainage we believe the most appropriate and effective approach is for the NIA to set-out a series of scenarios with clear milestones for decisions and delivery – an adaptive management strategy. We do not see that the NIA will have sufficient information to make site specific infrastructure recommendations outside of the formal planning processes and particularly the Statutory planning process for water resources. Such an approach would able the NIA to set-out its expectations for infrastructure to meet demands as a set of outcomes which can be monitored and reported against.

Q12: In your view, are there any relevant factors that have not been addressed by the Commission in its methodological approach?

The fiscal remit makes clear reference to the affordability on public finances. The methodology is less clear on value for money and affordability for customers. It is customers who will pay, and we would therefore suggest that the methodology recognises and clarifies how customer's interests (affordability/wiliness to pay) will be included within the approach. Similarly, it was not clear how the methodology will assess the objective 'improve international competitiveness'.

It would be interesting to understand the NIA's approach to both these areas. The approach taken in the water sector to building customer views, including on affordability, into decision-making has evolved a great deal in recent years and continues to do so as we approach our next price review. We would be happy to discuss these approaches with the commission.

Q13: How best do you believe the Commission can engage with different parts of society to help build its evidence base and test its conclusions?

We have highlighted above how existing approaches in the water sector to engage with customers can be used. In addition a wide network of stakeholders/communities, which represent the wider society are also in place and can be utilised to enable the Commission to engage as needed.