To the innovation consultation team,

Balfour Beatty welcomes the publication of Ofwat’s emerging strategy: Driving transformational innovation in the sector. We particularly agree with this statement on the first page of the document:

“We believe that the adoption of innovative approaches is key to delivering long-term resilience and great customer service at an affordable price, and the sector will need to step up and increase innovation in order meet the strategic challenges it faces in a cost-effective and sustainable way.”

Our response covers the following questions:

Q: 1 What are the main barriers to innovation in the sector and why?

Q: 7 Do you think the potential industry activities discussed in section four could help drive innovation? Are there other activities not identified which you think the industry should be considering?

To begin with, it is important to note that Balfour Beatty supports the objectives of Ofwat’s 2019 Price Review (PR19) for the water industry to increase investment while ensuring affordable bills for consumers. However, we are concerned that the current balance of risk and return may in fact increase the costs for consumers over the long-term by both disincentivising investment in innovation and skills, and simultaneously destabilising the supply chain, making it less productive.

Our response focuses on the following three points:

1. **Procurement processes** must deliver sustainable margins in order to ensure a stable, resilient supply chain which can invest in skills, innovation and equipment. **Tier 1 businesses are already beginning to ‘no-bid’ certain contracts because the poor commercial terms being offered are unsustainable.** If this becomes a trend, we believe it will become a problem for the water sector.

2. Greater certainty is needed before the supply chain will invest in Research, Development and innovation.
3. Contracts which share risk and reward fairly are more likely to provide an environment in which innovation can flourish than traditional procurement routes which see the supply chain bear the risk and the client take the reward.

The water sector is facing well-documented challenges on a number of fronts. From the pressures on the system relating to climate change and ensuring it meets increasing demand linked to population growth; to upgrading aging infrastructure, particularly the network of underground pipes; skills shortages; improving network resilience; and a need to keep costs down for customers, the sector needs to ensure it has the vision, strategy and the right partners to deliver.

The construction and infrastructure industry has a key role to play in this. It builds and maintains many of the assets, working in partnership with the water companies. And much of the innovation which we will increasingly rely on to keep down customer bills comes to the sector via the construction supply chain.

However, in order to invest - in skills, innovation and equipment, the supply chain needs to have long-term relationships with those commissioning infrastructure and a visible, reliable pipeline. There can be no investment if contracts are characterised by a short-term outlook. Contracts must also deliver sustainable margins in order to ensure a stable, resilient supply chain which can invest in skills, innovation and equipment.

However, although there are notable exceptions, the current relationship between some water companies and the supply chain can be transactional and adversarial, with too great a focus on driving down bids for the initial capital cost and little understanding of the actual cost of delivering schemes. The result of this aggressive procurement approach is that contracts that are drawn up and awarded without a proper scrutiny or understanding of what work should cost, so that risk is neither properly appreciated nor appropriately allocated. Disputes, which ultimately stand in the way of productive, collaborative long-term relationships, are commonplace. Contractors have the choice between taking on work that may well turn out to be loss-making, or walking away.

Unless the changes that have begun in some parts of the public sector, through moves such as the Outsourcing Playbook\(^1\), are adopted by the water companies, Balfour Beatty believes the industry faces an increasingly uncertain future. Contractors are operating on an unsustainable business model – and have been doing for some time. The financial crisis followed by austerity, teamed with the industry’s structural issues, have resulted in a construction sector which has, for over a decade, made only very slender profit margins\(^2\). Indeed, last year, the top 10 UK contractors made a combined margin of less than half a per cent on turnover of £31bn\(^3\). Meanwhile, labour and material costs have risen, particularly since Britain voted to leave the EU in 2016, leaving the industry squeezed on both sides. This is no longer sustainable.

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\(^1\) The Outsourcing Playbook, HMG, February 2019
\(^2\) Construction News 100
\(^3\) Building, [https://www.building.co.uk/top-150-contractors-and-housebuilders-split-fortunes/5094846.article](https://www.building.co.uk/top-150-contractors-and-housebuilders-split-fortunes/5094846.article), July 2018
We believe that, while in the past, contractors have been forced to accept contracts which are undeliverable at the tendered price, this is increasingly less likely to be the case. Unlike during the height of austerity when many loss-making contracts were signed, there is now a full pipeline of work including ambitious, high-profile schemes including HS2 and Hinkley Point C. Contractors are more able to choose what they bid. This means that, of course, they will choose contracts where they are able to make a reasonable margin.

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Of course, there will always be other, smaller companies willing to take on the work in spite of the unfavourable commercial terms. However, even this requires demobilisation, remobilisation and a learning curve which drives cost inflation due to inefficiency in the sector. Balfour Beatty believes that if the priority were to become value rather than lowest-price-wins, the result would be improved outcomes benefitting the customer.

In Balfour Beatty’s view, there are several areas where change must happen more quickly:

1. While there are many areas where innovative solutions could be developed to reduce inefficiencies and optimise existing assets, certainty is needed before the supply chain will invest in Research and Development and innovation.

2. The existing system can stifle innovation as competition between companies restricts the market for the businesses that bring forward innovation but do not want to offer them exclusively to one company.

3. Contracts which share risk and reward fairly are more likely to provide an environment in which innovation can flourish that traditional procurement routes which see the supply chain bear the risk and the client take the reward. Water companies will only see the innovation they hope for if the contract accurately represents the nature of the risk distribution required. Examples of this exist in the water sector, but are the exception rather than the rule. In these cases, success is characterised by collaborative agreements; risk sharing; Early Contractor Involvement (ECI); and Target Price Contracts with pain gain mechanisms.

4. There is currently little effective collaboration amongst companies on some of the key challenges they all face, for example, aging assets and leakage. This must change. We welcome initiatives by Ofwat to assist in this area, such as Regulators’ Alliance for Progressing Infrastructure Development (RAPID).

5. The sector must go beyond its traditionally risk averse approach and the tried-and-tested, towards a genuine innovation mind-set. It must move more quickly to a position where there are full 3D models of the network with embedded sensors which predict asset failures before they happen and enable less digging and disruption. However, moving to a data-driven model will require a significant cultural shift.
Conclusion

An efficient, innovative water sector needs a resilient supply chain. This, in turn, requires new contracting models and an understanding that traditional, aggressive procurement approaches have damaged the supply chain. Conversely, failing to address these issues will hold the industry back and put at risk the delivery of the network customers need and deserve at a price they can afford.

Balfour Beatty is working closely with its water industry clients and with other key stakeholders to encourage a long-term approach which delivers for the end-user. But the whole industry must take strategic, coordinated steps and a holistic view of the situation to safeguard future innovation and efficient charges.

About Balfour Beatty

Balfour Beatty is a leading international infrastructure group. With 15,000 employees across the UK, Balfour Beatty finances, develops, delivers and maintains the increasingly complex infrastructure that underpins the UK’s daily life.

Balfour Beatty’s Gas and Water teams work across the UK and Ireland, supporting a stable and safe supply of these vital services. Our water operations cover the whole lifecycle of networks, including clean and waste water mains, metering, treatment facilities and other essential infrastructure.

Working closely with our supply chain, we employ industry-leading approaches such as BIM and offsite construction to bring cost and time efficiencies to projects.

Balfour Beatty has a long history of working in the water sector, but we also work across a number of related, regulated sectors which gives us both a wide range of experience in this area, teamed with the ability to cross-pollinates ideas from others.

Yours sincerely,

Mark Bullock

Chief Executive Officer, Rail and Utilities