

20 September 2019

Subject: Ofwat's emerging strategy; driving transformational innovation in the sector

Having reviewed the consultation; in summary we welcome the approach and look forward to a positive outcome from this work.

Key challenges are clearly associated with how the Innovation Fund can facilitate less expensive, more effective, climate resilient and easier to install solutions for a variety of water and wastewater scenarios?

As a global business working cross sector and, in many industries, and utility types we see many approaches to innovation and work hard to add value wherever practicable.

We consider that discussion must be encouraged considering people, behaviour and culture across the industry appreciating views and approaches to risk and value. How can openness be encouraged? How to scale problems and reduce fear of failure? Do outcome delivery incentives inhibit innovation; does a focus on driving efficiencies and minimising fines divert resources away from elsewhere in the business?

Upward pressures associated with population, properties and network growth is a national issue. To address this, we believe that the innovation fund requires applications that have pan industry benefits.

We have provided a response to questions in the table, below are our overarching comments;

- Define key critical focus areas
- Quarantine Innovation – projects must be outside or in addition to those already being undertaken/have been undertaken by water companies
- Clear rules for the innovation budget and define metrics to measure success. Option to unlock further funding based on milestone reports satisfying metrics and promote industry learning.
- Define the innovation team/panel
- Consider collaboration with research bodies such as ESPRC, DBEI, Innovate UK

There have been many international programmes with significant funding designed to accelerate the development and uptake of technologies and practice, we would recommend a review of these programmes and their efficacy.

Jacobs innovation strategy is 'Future Made' and elements of our innovation plan aligns with Ofwat's proposal. We would welcome the opportunity to be part of future discussions that consider how to progress the programme and funding routes, product commercialisation, managing IP and driving collaboration.


We look forward to the development of this plan and the realisation of the value to be added.

Yours sincerely



John Beechey

Head of Engineering



<p>Q1.</p>	<ul style="list-style-type: none"> • Is Competition a help or hindrance to collaboration? Being leading edge, with optimum efficiency and a pinnacle of innovation success is not something Water Companies want to share with each other, yet the benefits of collaboration/innovation are evident? • Jacobs are aware of at least one topic area where WaSCs are doing their own R&D and specifically not sharing information on what is potentially a very valid, efficient, low cost circular economy type solution which utilises a raw material (waste product) they all produce in their own geographies. They are collaborating on other medias but keeping this option close to themselves; despite the substantial opportunity this would entail for compliance solutions particularly as there are no supply chain issues. • Discussion must be encouraged which considers people, behaviour and culture across the industry and appreciates views and approaches to risk and value. Recent poor performance by some companies and current EA mandates regarding unacceptable pollution and the necessity to improve may risk cementing a risk averse culture. • How to scale problems and reduce fear of failure? Do outcome delivery incentives inhibit innovation; does a focus on driving efficiencies and minimising fines divert resources away from elsewhere in the business? Water companies often trial new technologies even though the same/similar trials have been undertaken in other water companies. To what extent does board level acceptance, trust and willingness impact trial and scaling opportunities? • Mechanisms that balance the disproportionate impact of failure would make a difference. Scaling from lab to field may incur expensive offline field testing to obviate any risks to customers.
<p>Q2.</p>	<ul style="list-style-type: none"> • £200m - is this enough? The terms on which WaC could win would need clear description. Ofwat say they would like to see a collaborative approach; our view is that it may be perceived as a competitive approach which may hinder the collaboration which could lead to a much bigger overall reward. • Could this mean that WaCs submit their winning internal innovation competition ideas to this industry forum - would they have done this anyway? Are the benefits of innovative leakage reduction and AI tools on the wider company assets and expenditure drivers enough for those involved to run successful innovation platforms. If this is about collaborative innovation, then the nature of the competitive market Ofwat have proposed may make it difficult to comprehend the value for WCs to collaborate on everything of potential benefit. • Was Ofgem's LCNF better targeted? £250m over 2010-2015. "The original objective of the LCNF was to help all DNOs understand what needs to be done to provide security of supply whilst achieving value for money – as GB moves to a low carbon economy – and also what role the DNOs could play in facilitating low carbon and energy saving initiatives to tackle climate change." • Financial support will always be welcomed, the issue is how to maximise the benefits derived. This leaves the funding as most effective on pan industry collaborative activities whilst avoiding duplication of effort and cost; subject to an acceptable framework being implemented

<p>Q3.</p>	<ul style="list-style-type: none"> • Showing additional value from £200m from Customers above and beyond existing industry innovation efforts would be important. Ofgem's review of "LCNF " Research funding bodies such as EPSRC, DBEI, Innovate UK and other relevant industry initiatives should also be included to ensure funded innovation is optimised to deliver maximum benefit for customers;". Showing real collaboration to achieve this prize should be key. • Regarding principles on page 13, would the open book nature of data share discourage WaCs from participation in particular areas? • "Innovation can also be developed by doing business as usual activities (BAU) differently and having the right systems, processes and people to support activities." Does this blur lines with efficiency in delivery? • "A wide range of innovation proposals are encouraged, addressing the big challenges facing the sector and taking into account the strategic priorities and objectives of UK and Welsh governments." Would it more beneficial for Ofwat to highlight what it wants to see or the key critical focus areas (e.g. Climate). The Low Carbon Networks Fund was aptly named - and highly focused. Would a more focused effort be easier to judge reward/outcomes for Customers? • Difficulty in seeing how the principles could allow the most focused, quantitative, shared, collaborative innovation effort that benefits most customers. If one water company is successful, (unless a focus area) would all customers benefit? If the collaborative emerging cultures are the issue (combined with the competitive market) then customers may prefer to fund their local WaSC in developing the right attitudes rather than funding industry leaders in continuing to showcase theirs? • Do Ofwat have the right skillsets to "... retain appropriate strategic control or oversight over processes and decisions." as financial regulator? Should participation extend to EA, DEFRA, DWQR or indeed and perhaps more appropriately, other parties? • Would the innovative water companies already spending money on innovation/collaboration groups like WWIF, TAG, UKWIR, see the additional benefit in the contributions required for this Competition Model?
<p>Q4.</p>	<ul style="list-style-type: none"> • A key focus (e.g. low carbon networks) for the Innovation Fund would offer a similar targeted approach to the successful Ofgem LCNF. • Mechanisms to force participation and collaboration; the entire competition could be aligned with a joint collaboration. However, it is important to ensure this was something that wasn't going to happen already or previously in action would be a challenge. • Some learnings from the evaluation referenced of the LCNF could be incorporated to the Model which learn from outcomes and suggestions for the LCNF. A list of expected attributes of a winning model would need to have or evidence of clear beyond BAU and innovation as usual? • BAU for Innovation in one company clearly differs to another given Ofwat's own assessment and Draft Determination - how will this Competition help level the playing field and bring others up to the leader's standard as opposed to just rewarding ongoing great work by said leaders that may remain siloed.
<p>Q5.</p>	<ul style="list-style-type: none"> • Key mechanisms which avoid double dipping and risk of sub-optimal solutions or not best value. "Such risks could however be mitigated through the design of a robust assessment and decision-making process. " Consider the selection and importance of stakeholders in this process. • There is a risk that customers would really be paying for something that is not implemented in their own regions - the innovation competition contribution could be justified more than the roll out funds, hard to demonstrate wider benefits for most customers? • Potential dilution on the innovation competition could be an issue. Funds are specifically for adoption and roll out of successful innovations - would part of the judgement for a successful innovation be how to roll out without additional funding? • How will benefits be measured?