Ofwat’s emerging strategy: Driving transformational innovation

Severn Trent response

20 September 2019
Response in summary

We welcome the opportunity to respond to Ofwat’s emerging proposals. We believe this is a positive development for our sector, and our comments are focussed on contributing to the creation of a successful innovation fund and end-of-period roll out rewards.

In our responses to related consultations (from HM Treasury and the National Infrastructure Commission) we’ve highlighted that:

- ‘localised’ innovation works well within our sector - industry productivity has improved by 64% since PR94; there’s a healthy competition between companies to find better ways of driving up service (striving for upper quartile) and successful innovation is rewarded through ODIs; but

- more can be done to encourage dynamic innovation which has a longer lead time (over 5 years), has the potential to be transformative (addressing key industry challenges) and uses greater collaboration.

In the case of the latter, we believe there needs to be greater stimuli which includes access to seed funding and better exploiting the potential of being a ‘fast follower’. We’ve already taken action in this respect by working with nine other international companies to establish the World Water Innovation Fund (WWIF) and our experience to date has helped to inform this response.

The fund proposed by Ofwat has significant potential but its main challenge will be to strike a careful balance between incentivising an active competition for funds and securing greater collaboration and information sharing. This means getting its design right will be critical to its success, including:

- how the fund works in addition to existing innovation sources and funding (and not as a replacement for companies’ own innovation priorities);
- the focus and objectives for the fund – which might involve the creation of an innovation or fund strategy;
- ensuring customers are protected, but the risks inherent in innovation are accepted;
- given the fund’s aims, understanding who might be potential applications (for example, the partners external to the sector that companies may work with); and
- incentivising participation (ensuring companies have an incentive to propose projects, rather than being passive beneficiaries of the projects of others).
- Ensuring that awarding funds is done in a timely manner.

We’re also supportive of Ofwat’s proposals to introduce an end of period roll-out reward. This is an important recognition of the fact that an innovation in itself does not create value for customers – until it is implemented. And in some cases, the most value can be created by companies’ being ‘fast followers’ and finding a way to adapt or progress the innovations of others to the benefit of their own customers. Thought should be given to ensuring how early successes could be delivered to support the credibility of the fund.

We set out our views in more detail below, and the relevant questions from Ofwat’s consultation that they relate to.

Response in detail

Barriers to innovation within the water sector (Q1) and gaps in funding (Q2)

The key challenge for the development of innovative technologies for any company, in any sector (not uniquely water), is that success is uncertain, and benefits may not always be realised in the short or medium term. Successful innovation relies on the careful management of this risk and:

- the foresight to understand the benefits innovation could bring (the need or requirement);
- a commitment to dedicating the right resources to it (and some expectation of a return on this investment in the round); and
- a culture that fosters the best possible ideas (e.g. by failing fast and learning).

Arguably the challenges associated with delivering dynamic innovation (ie longer term, potentially transformation and inherently risky) can be exacerbated in a regulated industry as uncertainty about long term outcomes can create a natural bias towards the short to medium term in price setting – it is very difficult for regulators to balance the opportunity cost of not innovating now to future customers, against the risk that current customers’ money is not used well (ie accepting some risk of failure). The fund should seek to deliver some short term success to build its credibility.

Most of the incentives within Ofwat’s current framework reward innovation where it has demonstrably delivered benefits for customers in AMP (either ODIs or totex outperformance). Where innovation could take multiple regulatory periods for the benefits to be realised, requires a longer term funding commitment or is even prohibitively expensive for one party to bear, it could prove too great a risk – despite having the potential to be transformative for customers in the longer term. And it’s in this space that we believe a well-designed innovation fund that complements existing innovation stimuli could go a long way to create new opportunities within the regulatory framework.

Developing new approaches or technologies is also only part of the challenge; to deliver benefits for customers and the environment they also need to be adopted and embedded by companies. This is rarely as simple as taking a solution ‘off the shelf’ and will likely require additional investment, testing or modification for it to be applied to the water industry’s and even companies’ own specific circumstances - another form of innovation that could be further recognised. Our current (AMP6) sustainable sewage treatment performance commitment was designed to go some way to recognise this – by rewarding the successful roll-out of new technologies that would negate the need for ‘traditional’ investment to increase capacity - and we would support the introduction of a roll-out reward that continues in this spirit (see later).

It’s also important to recognise that even the strongest innovation will not necessarily revolutionise our industry in the short term. Most water companies have portfolios of assets that have developed over timescales spanning in excess of 100 years and it rarely be cost beneficial to customers to introduce wholesale change overnight. We need to make roll-out work in the context of the industry’s asset base and regulatory framework.

Protecting customers, while accepting some risk (Q3)

Given that the £200m of additional investment proposed by Ofwat would be funded by customers, we support Ofwat’s proposal that a series of principles and measures should be in place to protect them. These measures need to strike the right balance between the level of protection and accepting that some risk is inherent in
innovation. This is particularly important because, if the investment is to create value for today’s and future customers, then the competition for the funds must encourage the best possible proposals – that is, it needs to be an attractive prospect that fairly shares risk and reward.

We are broadly supportive of the principles put forward to safeguard customers but as we explain below, how and when they are implemented could have an important bearing on the success of the fund. In particular the claw-back mechanism will need to be carefully and transparently applied (to ensure that it focuses on misuse) and over an appropriate timescale (some projects could run over more than one AMP).

Collectively-funded innovation competition (Q4)

As we note above, the design of any innovation fund/competition will be critical to its success. There are six considerations that we believe will be particularly important for the design of the fund and would need to be worked through as Ofwat enters the next stage of development.

1. **Where the fund fits in the wider innovation landscape.** Water companies already have their own innovation priorities and programmes, there are existing sector research organisations and there are a range of different external funding routes for innovation for water companies – we’d like the new innovation fund to out its own space within this landscape, becoming an additional to, rather than replacement for, existing initiatives. As the water fund develops, we would encourage consulting with participants in other funds and from other sectors to understand from their experience what makes a fund work. (This is because they won’t necessarily have responded to this consultation.)

2. **What the fund aims to achieve/the legacy it leaves.** There are a range different aspects of innovation that the fund could potentially target from the generation of ideas, to development to actual roll-out. It could target one area or all three.

3. **The issues the fund is focussed on.** In our experience, one of the main barriers to innovation or the reasons that it is ineffective is that the question it is trying to answer is poorly defined. We believe that the innovation fund will be most effective if there is an industry innovation strategy (or needs document) so that all stakeholders – companies, regulators, government and customers – have a common understanding of what is trying to be achieved and against which progress can be gauged. With the fund looking to the longer term, like Climate Change and triple pledge. Consideration should also be given to which activities are included – for example renewables.

4. **Who can participate?** Ofwat’s proposals focus on a collaboratively funded competition whereby the benefits that projects have delivered are shared within the sector. We support this principle but we would expect that in practice, parties outside our sector would want to participate in the competition as partners with water companies. This is because few water companies have ‘in-house’ research and development teams and instead adopt an open-innovation approach whereby we draw in expertise and technologies from outside our industry and form collaborations or commercial agreements. How risk and reward is shared will be an important consideration in attracting partners or collaborators.

5. **Making the competition work.** The principle of ‘open by default’ is important as projects will have been collaboratively funded by customers and they should all stand equal chance of benefitting from them. However, this also creates a challenge as if the outcome of projects funded by the competition is shared, then in theory, companies may not choose to invest the time, resources, match funding and opportunity cost involved in participating because they still can benefit from the outcome by not doing so. This becomes even more challenging if companies plan to work with partners or collaborators from outside the
sector and may want to use the outcome in competitive markets. Depending on the nature of the project and the stage of development, IP will be generated, there should be opportunities for commercialisation and participants may expect the right of first use. So while ‘open by default’ is important, the really key issue is how the most value can be created for customers and how the innovation developed can be translated into a viable proposition that can be implemented. This could for example, involve applicants developing an output sharing strategy as part of their approach.

A further consideration would be how to make the fund most effective where companies want to involve third parties, so that they can continue to observe their procurement law obligations.

6. **How to reduce uncertainty for all parties.** As noted above, the fund needs to strike a balance between safeguarding customers and accepting the risks inherent in innovation. This would mean for example, defining upfront the terms (and timescales) on which funds would be claw backed if they had been misused or not used at all, and ensuring they are distinct to viable projects failing for good reasons. Having the right risk culture is vitally important – often the best and most efficient outcome for customers can be secure if failure is accepted early in projects before additional investment is made (ie ‘fast failure’). And it’s important that this understanding of risk stems beyond water companies and that other stakeholders – customers, government and Ofwat too accept it. This could involve ensuring signing up to the innovation strategy or having an engaged role in the fund.

**End of period innovation roll-out reward (Q5)**

We agree with Ofwat’s view that further incentives could help to increase the adoption of innovation across the sector. In the current AMP, we introduced a Sustainable Sewage Treatment performance commitment that is designed to work in a similar way to a roll-out reward. At the time we designed the commitment, we recognised that as an industry we had traditionally looked for tried and tested solutions, which have a higher degree of certainty in the output, when meeting the challenges of higher quality standards and growth pressures. As a company we were in the mind-set of using known design solutions to overcome the problems we faced.

The performance commitment was designed, for the specific case of sewage treatment (but similar in principle to our catchment management performance commitment) on the hypothesis that by thinking differently and not necessarily continuing to build in additional capacity into our sewerage system and treatment works, we could reduce the cost burden on our customers in future AMP periods. To successfully deliver against this commitment we would need to take on more risk.

As we reach the end of the AMP, we’ve now put forward two projects that we believe meets the commitment and we’ve learned that this biggest opportunity potentially lies in encouraging companies to be fast-followers who can roll-out novel technologies at scale. We would encourage Ofwat to target a roll-out reward that focuses in this area in particular.

**Other sector wide industry activities (Q6)**

We’re supportive of the creation of an industry-wide innovation strategy to help to focus the innovation fund and complement (rather than over-ride) companies existing plans and strategies. We’re also supportive of the creation of centres of excellence to test, trial and scale innovations. However, a number of companies already have their own test-beds (typically focusing on their own areas of expertise) and rather than seeking to create a new single centralised test-bed, we could first consider how existing facilities could be shared or leased. Finally, we’re generally supportive of initiatives that seek to unlock the value of data that water companies
hold. This is an increasing area of focus, and further consideration could be given to how the industry could collaborate on the direction it takes (rather than prescriptive action).