

Response to Ofwat's Innovation Consultation

Q1: What are the main barriers to innovation in the sector and why?

- 1) The UK water sector is awash with innovations: ideas that have the potential to bring incremental improvements to water company operations, with new solutions being presented to the market each year from a sophisticated supply chain of diverse organisations from around the world. Water companies have developed a mature approach to finding, assessing and encouraging technological innovations, with dedicated innovation teams in most companies tasked with managing the innovation process.
- 2) However, despite a constant supply of new ideas, adoption is almost always reported by suppliers as slow. New ideas are quick to be tested and slow to be adopted, even when there is a beneficial business case. Adopting new ideas almost always comes with risk and the water industry is naturally risk averse. An additional barrier to adoption after testing is that in some cases, trials do not answer all questions for all stakeholders. For example, a trial may have been deemed successful but operations or procurement were not involved and therefore the solution cannot be rolled out or additional trials are required to answer outstanding questions. Finally, through Isle's European TAG programme we often hear that water companies feel, particularly with digital innovations, that they could develop something similar in-house. This may be the case, but it rarely happens.
- 3) Transformational step-change innovation, rather than incremental technology-lead innovation, is currently difficult in the water sector due to the challenges of running a service critical to public health and perceived penalties for failure. At a strategic level, water companies often lack an innovation strategy that looks far enough ahead that matches investment with their challenges. The result is pockets of innovation within companies that isn't joined up. When companies don't have a strong culture of innovation nor the correct structure and strategies in place, it is difficult to implement large, step-change ideas. Innovation managers working at middle-management level prefer incremental technology-lead innovations and companies supplying major step-change innovations lack a sponsor at a sufficiently senior level to take their innovation forward.
- 4) Water companies also face external barriers to innovation. Strict regulation can often amplify the risk of trialling new ideas, with customer impact and penalties discouraging a push for change. Additionally, to trial a technology at scale there appears to be a requirement to adhere to OJEU rules. This commercial procurement exercise is limiting the number of technologies that get brought to market. In addition, it seems there is an undercurrent of tier 1 and 2 contractors stating that they are not incentivised to innovate, despite being on frameworks that have been set up to promote innovative behaviours.
- 5) From a technology company perspective an external barrier is that procurement of solutions from SMEs by water companies is challenging as many do not meet the supplier requirements. Even after successful trials, this can then leave the innovation left unadopted. Considering the startup life cycle of technology companies is under 5 years, this leads to them failing or moving in to a new market which is a loss to the water sector as a whole.

Q2: Do you think that the financial support cited in section three is required to stimulate innovation in the sector? If so, what do you believe is the appropriate amount of funding and why?

- 1) The current system encourages innovation at a certain level. There are countless examples of innovations centred around technological innovations that increase efficiencies, resulting in incremental developments at single company level. This fund is therefore not needed to encourage more incremental innovations.
- 2) To achieve step-change innovation, however, the industry needs a means of testing major cross-organisational innovations that are not currently possible with the 'single company' approach. Access to a fund could help by removing the element of financial risk, perhaps supporting innovations that do not have an immediately clear business case but align with taking the sector forwards or meeting difficult challenges.
- 3) However, financial support alone will not stimulate the innovation needed. An approach to consider is coupling this support with other incentives such as positive PR and means of mitigating regulatory risk. In addition, other sectors have demonstrated the need for good governance to ensure similar projects are not granted funding, resulting in duplicate work. It is also essential that learning outcomes from the fund are shared with all regulated entities. However, Isles have seen instances where companies do not want to share information and this is therefore a danger with this scheme.
- 4) Another consideration is the fund must allow the water company to be more forward thinking and committed to step-change innovation. So this needs to be well governed to ensure companies are sharing the risk and contributing sufficiently in a way that gives access to an upside reward.
- 5) It is difficult to determine the exact amount of funding needed to stimulate innovation, but as a starting point Isles opinion is that £200 million total would be a sufficient size to test this new approach in the next AMP and catalyse innovation. The amount needs to be sufficient to incentivise water companies to break through barriers to innovation without making it too easy to succeed.

Q3: Do you agree that our proposed draft principles for additional financial support will effectively safeguard the interests of customers?

- 1) Overall the interests of customers has to be with a resilient and sustainable sector that is able to perform into the long term future. Innovation is required to maintain and improve the level of current service in addition to safeguarding the environment. This fund is a signal on behalf of the customers that the water company should be focussing attention on innovation and taking calculated risks to make those steps forward.
- 2) It must also be noted that the spend will be in 2020-2025, however the benefits might not be seen until many years later. Changing culture, systems and processes is not instantaneous and will require true leadership and an effective way of measuring the performance change through benchmarking exercises.
- 3) The safeguarding can be ensured with the correct independent oversight to adjudicate what is innovation and whether it is in line with a sector requirement.

- 4) The ability to 'claw back' dispersed funding needs to be implemented in a way to protect any company who has acted in a conscientious way and not to prevent any innovation for fear that this clause be enacted.

Q4: What are your views on the collectively funded innovation competition model which we describe in section three? What other key considerations not highlighted should we take into account in designing/ implementing the competition?

- 1) The focus is primarily on how water companies will influence innovation and this fund should consider how it can be accessible to others. Section 3 seems to suggest it will only be water companies who lead innovation projects and applications to this fund. Logically this makes sense but to improve innovation then other solution providers could be seen to take the lead. Having a water company only fund might limit the stimulation of sector wide innovation.
- 2) The administration of the fund should be as minimal as possible. The ratio to deploy the funding needs to allow as much of the finance to be applied to innovative projects as possible. 1% of the total fund could be set as an aspirational cost of administration. This could be achieved by leveraging existing networks and structures to deliver.
- 3) The competition model and leveraging all water companies funding is a positive for WOCs. Due to scale they have challenges to deploy innovation and yet Isle has seen them propose some of the most innovative ideas.
- 4) Managing innovation projects by committee is difficult even when all parties are fully invested: the strength of the independent entity is important in setting the direction and arbitrating the outcome of a project. Joint/collaborative approaches can work, but not necessarily when a focus on people, processes and systems is desired. Companies will be starting from different points.

Q5: What are your views on the end-of-period innovation roll-out reward we describe in section three? What other key considerations not highlighted (e.g. whether it should be collectively funded or individually funded) should we take into account in designing/implementing the reward?

- 1) The end-of-period roll-out reward model will need careful planning to encourage transformational innovation. As it has the potential to drive a short-term approach to innovation. The first year will be for setting the framework, the second year for deciding on which project to pursue and the third year for delivering the project, leaving only two years of the AMP cycle to roll it out, understand the benefits and benchmark and compare it to others.
- 2) The independent entity set up to oversee the awarding and implementation of projects will be able to undertake an assessment on the level of innovation and performance criteria it needs to reach at the start of the project. Will this could be based on how many customers are affected, or how much money is saved, or providing resilience, etc.? Depending on how the reward is scored, it could drive both desirable and undesirable behaviours in the competition.

- 3) The reward is also focussed on the water company, if the sector is looking to increase the level of new technology providers then one approach would be to open up the reward to allow them to gain for taking the risk of entering the market.

Q6: What other potential alternative mechanisms for funding/rewarding innovation not discussed do you think we should be considering?

Which financial support mechanism or combination of mechanisms should we introduce and why? What would be an appropriate split of available funding / reward?

- 1) Opening the support of the fund to applications to train and develop staff. A key blocker to innovative technology adoption is organisational culture.
- 2) Financial rewards may have only limited appeal, given the risks that trying something new often comes with. Being seen to be innovative carries a great reward for water companies, improving their public image and giving them a positive message to promote. Therefore, being endorsed as innovative by a regulatory body would carry significant weight.
- 3) There is scope for innovation benchmarking, assessing how companies are performing in comparison to each other and how they are performing in relation to adjacent industries. An example would be the Institute of Customer Service report that compares in and outside sector performance.

Q7: 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?

- 1) UK Wide Innovation Lab: as an alternative to a fund or along side it. This idea centres on setting up a competition that invites technology companies and or project ideas to enter a competition to win the opportunity to be hosted at water companies. The 'lab' experience will enable innovation to occur in conjunction with water companies leading to increased chances for scale up. As a UK wide initiative the fund would support each company to develop an innovative culture and access financial support.
- 2) A water Centre of Excellence could mirror some facilities developed by private companies such as SUEZ and Veolia, and some facilities operated by academics such as Cranfield, Sheffield, Exeter, York universities. Isle considers that it would be preferable for the initiative to virtually tie the expertise and centres of excellence around the UK together. Another physical space, with another layer of bureaucracy, is not required.
- 3) Leveraging existing networks where water companies and innovation already meet. This includes potential to add further value to the outputs of networks such as the Technology Approval Group (TAG) run by Isle.
- 4) It would be positive to see a published strategy for innovation for each company, however, publishing a strategy is useful only where it offers clear requirements and not just intentions. A joined-up approach would enable the collaboration to be initiated and ensure that water companies are aligned.

Q8: Do you think the proposals in section 5 will help drive innovation? Are there other activities not identified which you think Ofwat should be considering?

- 1) Provision of regulatory advice to those seeking to introduce innovations into the UK market can only be a positive step. Water companies have an inherent drive to show they are being innovative, both to their customers to enhance their public image, and protecting their credibility with their regulators. This drive to be seen to be innovative is not accounted for in the activities described and is an important driver.