

United Utilities' response to Ofwat's emerging strategy: "Driving transformational innovation in the sector" consultation

20 September 2019

Introduction

United Utilities Water is pleased to respond to Ofwat's consultation on "Driving transformational innovation in the sector". Our response is aligned with the structure of the consultation paper and sets out our views on the eight consultation questions.

In addition to this consultation response, U UW would welcome the opportunity to participate in any future collaborations or workshops in pursuit of developing this proposal further. We would also actively wish to work with the rest of the industry in the development of framework and principles to any funding mechanisms. This would also include participation in the other proposed activities including, but not limited to, an industry wide centre of excellence.

United Utilities can offer support to Ofwat's efforts in its drive to improve the scope for and delivery of innovation in the sector. In particular, we could offer assistance through the following capabilities:

- Effective strengths in facilitation, resilience, speed / agility and communication;
- High technical competence in supply chain management, matrix management, innovation strategy from other sectors – drawing on strong asset, science, engineering and operational resource;
- Strong credibility and relationship with other water company R&D / innovation teams, academics and water sector ideas scouts;
- Experience of setting up collaborative utility ventures such as Selctusonline (for standardising specifications and aggregating volumes);
- Designing, leading and influencing ground-breaking innovation models such as the World Water Innovation Fund and the Innovation Lab and our approach to inspiring innovation in large organisations e.g. our CEO Challenge programme or Apprentice Spring challenges or connecting employees to innovation problems; and
- A growing reputation and credibility with the start-up and investment community.

We would be pleased to discuss further what support our innovation team can provide as Ofwat moves beyond the current consultation phase.

United Utilities has worked hard to ensure there is a strongly embedded innovation culture which has provided us with the right conditions to make a focused effort in delivering innovation to make our services better, safer, faster and cheaper for our customers. Our approach to innovation has seen significant transformation in our efficiency and service performance and will continue to do so.

Innovation has been prioritised as a company value that sets behavioural expectations for all our employees. These values are rewarded through the annual appraisal process and in their potential to achieve a bonus directly linked to their contribution to innovation, recognising there is a clear link between an engaged customer-focused employee community and an innovative culture. The focus from our senior leaders, along with our central innovation team and innovation capability across the business, against a backdrop of opportunities provided by the outcomes and totex approach, has significantly increased our ability to deliver value for money for customers.

One, of many, success factors has been our approach to central innovation with a dedicated Innovation Centre where we can, and do, brings employees, academics, suppliers and customers together to unlock problems and adopt more innovation. This central team leads with a passion and enthusiasm for the end result as innovation must always lead to a new learning or a chance to adopt innovation and improve business performance and we would be pleased to help support the broader development of innovation in the sector.

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

When considering the main barriers to innovation in the water sector, it is worth – at the outset – acknowledging that there have been many supportive changes in the regulation of the sector over the last 10 years, and most specifically in the last two price reviews. These have already unlocked many of the logistical and regulatory barriers to innovation, although it can take time for companies to recognise this and maximise use of new freedoms. At PR14 the shift from output-based regulation to outcome-based regulation allowed companies more flexibility to innovate by considering a wider range of options when looking at how to deliver customer service improvements and regulatory commitments. This was supported by a totex regime that enabled more balanced incentives between operational solutions and more traditional capex intensive options – this also allowed for more innovation in developing the best whole life cost solutions for customers.

At PR19 the inclusion of innovation as a key focus for assessment within the Price Review methodology also gave companies greater legitimacy to pursue more stretching innovation ambitions, and better focused industry attention to ensure innovations delivered the next phase of efficiency and performance improvements, including a better use of markets. This requires forward thinking and a change of mindset.

Below we set out five barriers to innovation which we think are very prevalent in the sector and which need careful consideration as Ofwat considers how to further incentivise innovation. These are:

- The organisational and cultural barriers which limit activity and scope;
- The comparative regulatory regime's incentivisation of companies to retain a competitive edge can restrain or delay the dispersion and adoption of innovations;
- The risk of uncoordinated effort and the lack of incentives to cooperate;
- The sectoral focus on regulatory cycles and payback periods which can lead to limited and uneven approaches to innovation; and
- The impact of procurement legislation, whilst a necessity, can stifle innovation – a concern often identified by the supply chain and in particular disruptors and start-ups.

Organisational and cultural barriers

We agree with Ofwat that a company culture which supports and encourages innovation is an essential prerequisite to success. Given the evidence that Ofwat cites about the mixed levels of innovation in the sector, it is important that all companies look to implement a strategy which fosters and promotes innovation in the business.

Our PR19 supplementary submission *S5001 – Innovation in Action* sets out the way in which United Utilities has approached this by developing an innovation strategy supported by a core innovation process in an environment where there are clear innovation enablers. Our Innovation Model is depicted in figure 1 below. We commend this approach as one that has worked well for us and which could be adopted more widely in order to overcome internal or cultural barriers to innovation. Achieving innovation even on a limited scale, or pilot level, can be extremely challenging if the cultural and organisational context is not supportive. This issue is magnified when it comes to the point of trying to roll out innovations for wider adoption, where the challenges are potentially even tougher.

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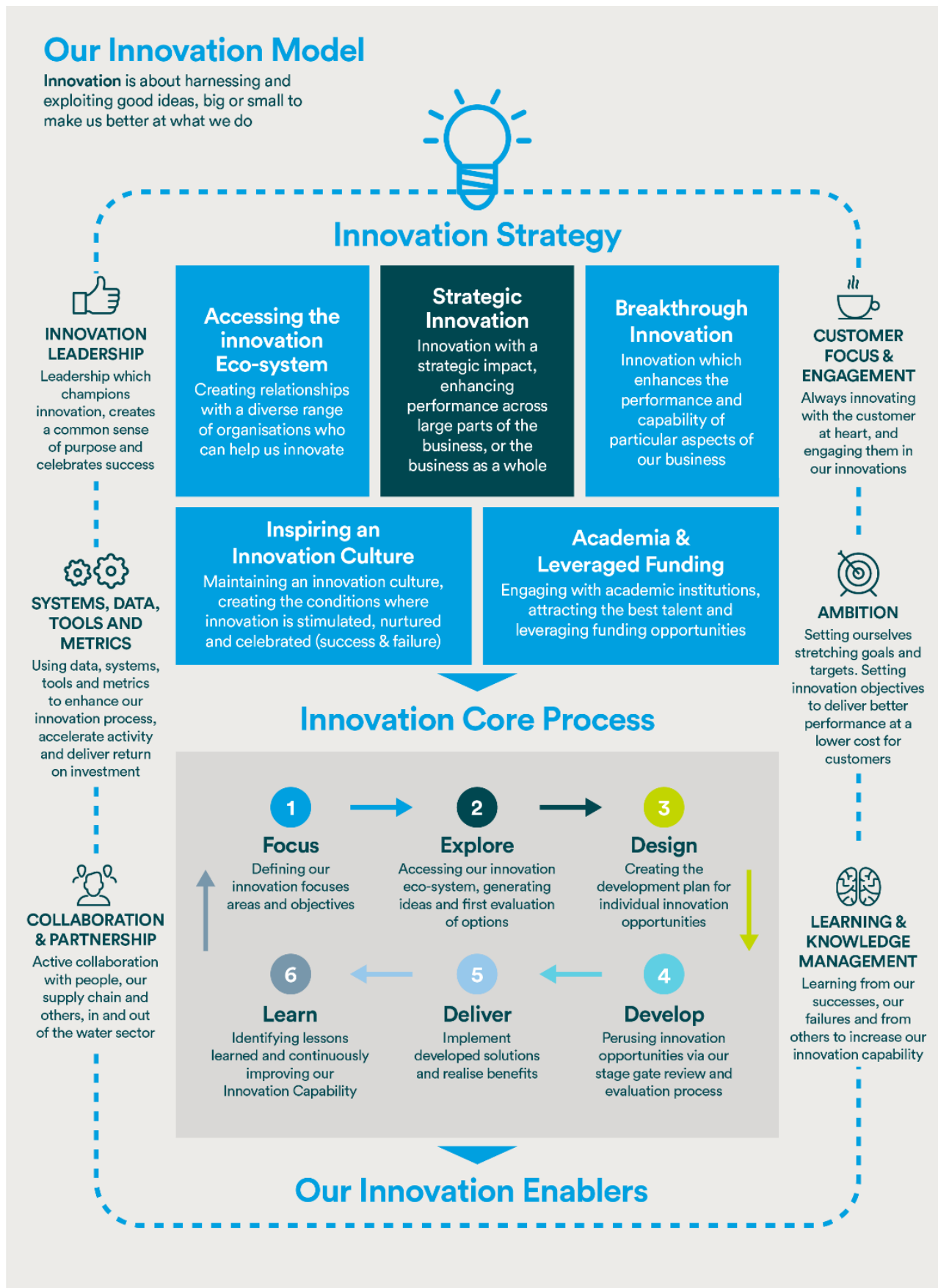


Figure 1 United Utilities Innovation Model

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Competitive edge

Competition for ideas and seeking improvements in performance for customers can be a spur for innovation. This is true in competitive markets and it is also true in environments such as the water sector where companies engage in comparative competition through league tables (e.g. SIM, Performance Commitments, RORE, etc.) in order to achieve better outcomes and deliver better services.

However, whilst the economic and reputational forces of rivalry will act to drive innovation within a company, it will also lead to companies seeking to retain competitive advantage by retaining their insight rather than sharing it freely. This therefore acts as an impediment to the wide adoption of innovations and whilst, eventually, industrial "osmosis" tends to mean that knowledge of innovation does migrate across companies over an extended period of time, it will be slower than would be the case if there were no incentives to retain innovation as internal to a single firm.

Uncoordinated effort

In circumstances where firms make individual efforts on innovation in order to gain competitive advantage, this can represent an individually rational strategy. However, where this leads to multiple firms investing in innovation in the same areas, this can lead to investment being either duplicative or subscale. Were such investments able to be better coordinated between a larger number of parties then expenditure on innovation could, in principle, deliver better outputs, more quickly, for less overall investment, for a greater number of companies, thereby maximising the benefits for services to customers. Better coordination offers the promise of overcoming a number of issues that arise where companies undertake individual actions on innovation. These include:

- Lack of collaboration in setting the scope and success test parameters for any exploratory or trial phase, meaning the early exploration would be from the perspective and challenge of one company with no consideration to regional difference;
- Non-sharing of success / failure / lessons for innovations could see repeatable failures and / or slower optimisation and delivery of benefits by others; and
- In order for the founding company to maximise the time advantage of any innovation success the commercial arrangement could mean suppliers with other companies would have to start from the beginning, or repeat steps to deliver on behalf of another company.

Against this backdrop, a more coordinated approach to innovation appears attractive.

However, there are several challenges to achieving this more beneficial outcome. Firstly, firms retain incentives to seek an individual competitive edge and in many cases may not be able to identify the benefits of greater cooperation. Secondly, there is a risk that in seeking to coordinate innovation across multiple firms (or across a sector) there can be a loss of diversity in approaches and – consequentially – there may be reduced scope to identify and successfully execute an innovative approach. Coordination of innovative efforts therefore has a range of potential advantages and disadvantages. In developing a more sector wide approach to innovation it is therefore essential that this takes account of this and steers a path which maximises the potential upside and limits exposure to the downside of coordination.

As we set out in this response, this leads us to conclude that the type of innovation incentives being considered by Ofwat are better suited to new, currently unaddressed challenges which confront the whole of the sector rather than incremental improvements which resolve existing issues or investment in initiatives which would only benefit a proportion of the sector. We believe that it is in areas where knowledge is limited and where all companies have big incentives to learn that the benefits of a coordinated approach to innovation are likely to be maximised and where there is likely to be greatest cooperation achieved between companies in working together. Such sector-wide opportunities include issues such as trace substances in surface waters and meeting the environmental quality standards (EQSs) for a wide range of chemicals, in addition to the impacts from antimicrobial resistance and microplastics. These are all example areas where the industry will benefit from increased collaborative innovation across

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the sector, as well as with regulators, to ensure the right policies and strategies are in place to address these challenges in the future. Other areas where collaborative innovation should be encouraged are for pan-national customer behavioural change, to benefit issues such as water efficiency and non-flushables.

Regulatory cycles and payback periods

Although there are good examples of successful innovations where both investment and payback play out over multiple 5 year periods – such as UU's "Future Concept of Operations" investment, as described in *S5001 – Innovation in Action* – it is reasonable to characterise these as the exception rather than the norm. We consider that the focus on the five year regulatory cycle tends to reduce the visibility and viability of longer term innovation efforts where a payback might only be achieved over a longer term time horizon. Furthermore, where there is pressure to demonstrate a five year payback on investment – which is a relatively short time horizon for many innovations in a sector characterised by long term investments – this can tend to focus innovation efforts early in the AMP.

We therefore believe that action taken by Ofwat to enhance the scope of innovation in the sector should try wherever possible to counter – rather than reinforce – the focus on a five year cycle. It could do this both by encouraging longer duration investments and also acting to smooth some of the saw tooth nature of activity between different AMPs. As we set out in this response, there are some aspects of Ofwat's approach which we believe could limit the success or scope of investment in innovation as a result of the understandable focus on wanting to present clear cut successful results in a limited timeframe.

Procurement Legislation

EU procurement legislation dictates an open, transparent and fair process that includes competition. These are sound principles but can stifle innovation. Examples of this can be seen with the legislative requirement for client volume aggregation, where the extent of supply has to be tendered in its most fulsome resulting in high contract values. Only companies who can comfortably cope with this demand and have significant turnover become qualified, which rules out early stage, start-up and small companies who may be the most disruptive and could offer best value.

Traditional procurement prescribes the exact specification that meets industry and company standards – and then seeks offers from the market that are fully compliant with this specification. This disadvantages potential disruptors as their unorthodox offer will not meet the compliant specification – and so these offers are non-compliant and rejected. Even after proving new ideas through trialling, EU legislation demands that we seek competition before awarding contracts and to seek competition we are driven to share the innovative specification with the market – revealing competitive advantage and intellectual property. Understandably, many innovators restrict this as they see their ideas "picked off" by larger more established companies. The penalties for transgressing these rules are onerous and drive a "safety-first" and risk averse approach to procurement.

An open innovation strategy relies on offers from the market; keeping track of potential disruptors and their innovations is time-consuming which can be costly for companies to do this individually.

United Utilities has worked extensively with the disruptors and start-up community over the last few years. Their feedback tells us that the water sector is an unattractive one to penetrate, citing EU procurement legislation and sector inflexibility on changing standards to be key reasons for their lack of enthusiasm. We recognise this and have worked to amend our business processes to push the boundaries on EU procurement. Our successful Innovation Lab programme has broken down many of these barriers already and has delivered positive results for the sector and our customers. The Lab programme is a model we would encourage others to adopt – perhaps at a national scale.

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Q:2 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?

We believe that the scale of customer bill increases proposed (to fund the level of financial support over the 2020-2025 period), would result in a bill profile broadly acceptable to customers. Customer insight over the last few years has identified an expectation by customers for the industry to innovate and there has been general support for a shared contribution to such innovations with additional expectations on the transparency of the return on investment. Through our engagement we have also found that there is recognition and some acceptance that the process of innovation is likely to mean that in order to find some innovations which can succeed, there will be other attempts at innovation which result in failure.

It is anticipated that companies will have innovative ideas that require significant capital investment, which are outside of their current plans, and perhaps longer term with benefits being delivered outside the current period. We agree that the financial support proposed could help to unlock some of those ideas to progress them further.

However, where such investments are undertaken with the benefit of industry wide funding, it will be important to be clear about what the transparent sharing of progress and findings with others means and how and when this is to be achieved. To date, we have seen limited evidence of companies complying with such requirements - where they have been imposed by Ofwat - and we believe there is a lack of definition of what sharing involves.

In order to benefit from payments from the mechanism there also needs to be clarity of the timing of the sharing of information. This should be agreed upfront and needs to balance the need for the innovating company to demonstrate a return on its investment in innovation versus the desire to share information about the innovation for adoption by other companies. If the exclusivity period is too short then this could (perversely) incentivise non-participation by innovative companies, if all eligible innovations are shared with all companies rapidly, and for free.

Achieving this balance may be difficult and requires careful judgement. The corollary of this is that the proposed financial support may be better suited to innovations that resolve industry-wide issues, to the joint benefit of all companies, rather than innovations that deliver company specific improvements in a benchmarked level of service. This is because the areas of widest potential applications of benefit and areas where companies currently know the least are likely to be areas where companies may find it easier to collaborate and share information rather than areas where companies are making incremental improvements on existing issues which are subject to comparative competition.

We therefore believe that the focus of Ofwat's innovation efforts as reflected in its consultation should show a significant bias towards the bigger, large scale challenges to be faced by the industry in the future which companies are only just starting to address.

Q:3 Do you agree that our proposed draft principles for additional financial support will effectively safeguard the interests of customers?

Our comments on the proposed draft principles are as follows:

- We consider that the principle that the arrangements should support only those projects and innovations that companies would not otherwise explore or invest in is essential to provide value for money for customers. Putting in place a robust assessment methodology to assess bids against such criteria would therefore be required. In addition to rejecting proposals already planned or considered, bids for financial support for innovations that had been previously rejected by companies or were lacking in terms of return on investment need to be carefully screened out to effectively safeguard customers.

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- We welcome that proposals could be about technology or simply "doing things differently", and also the principle that the innovation should be just as much about the roll-out of innovations at scale as the early incubation of new ideas and solutions with funding available to projects of all types or scale. Innovations in data will also be key, such as improving the science of emerging trends to inform policies and strategies such as climate change and micro pollutants. It will be key in the development of these principles that it is very clear whether the fund is to support companies to achieve best practice, or to genuinely disrupt and create new standards.
- The principles appear to be more amenable to innovations that resolve industry wide issues, more so than company specific innovations. If this is indeed the intention, then we believe that the principles would benefit from a clearer statement that any collective funding, contributed by customers nationally, should be investment to address problems applicable to the generality of companies and customers.
- The principles also appear more amenable to shorter term innovation development. For example, the requirement for the innovations to provide value for money could imply that this value has been delivered by the end AMP7. This may not be long enough to realise benefit for all potential innovations, as some may only achieve full customer benefits over a longer time period. For example, developments in artificial intelligence may require investment in sensors, software robotic tools and remote operation, but may still take a number of years to achieve the full benefits of machine learning as system states are observed and learned from over a period of time. As set out earlier in this response, we believe it would be more beneficial if Ofwat's incentives gave greater emphasis to results and investments away from – rather than reinforcing – the existing regulatory cycle.
- We believe that the principle that companies will need to provide evidence of how they are working together and with others (including other water companies, their supply chains, and companies in other sectors), and/or a commitment to transparent sharing of progress and findings with others within the sector and beyond is highly significant and where innovation is focused on major and emerging sector wide issues we consider there is a particularly strong case for mandating open access to information and participation.
- Open data is also a key principle and there should be firm support for this with the right initiatives. The benefits of open, shared and collaborative data strategies are well demonstrated in specific projects. This includes the UKWIR / Industry collaboration for the Chemical Investigations Programme, whereby the national data set (covering over 600 wastewater treatment works) has revealed statistically significant trends that were not evident from individual companies. This dataset has not only revealed national significant trends but is now being used by the EU to inform its future water framework approach.

Q:4 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?

The innovation competition model sets out to support companies' innovation project proposals from a collectively contributed fund. This would benefit the development of solutions to common long-term strategic challenges alongside the other proposed financial support activities including the innovation in water centre of excellence.

This would supplement the existing range of performance and incentive mechanisms, up to and including 2025. It should also be feasible for this to support the development of longer term innovations that may otherwise be stifled within the more traditional shorter time frame regulatory periods, recognising the trials and benefits of any successful innovations may not be seen until after the 2020-2025 period.

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There is a fast growing movement of technology and innovation development and we believe that the transferring of technologies between sectors is big opportunity for the water sector. Such technologies include robots, autonomous vehicles, advances in science and new materials. Water companies acting alone may not be able to fully capitalise on these opportunities with sufficient pace, and the collective fund could have emphasis on exploring and finding appropriate applications for these new technologies within the water sector. To benefit from such technological advancements, both within the water sector and more broadly across the regulated industries, both companies and regulators should consider the need for additional dedicated resource focusing on this crucial area. Keeping pace with the speed and scale of technological changes will be key to fully embracing and benefiting from the associated opportunities to innovate to deliver better value for customers. Setting the right framework for the competition could unlock some of the benefits associated with these opportunities.

The proposed framework for access to any competitive fund should ensure that it has the right application criteria and success criteria, in addition to any clawback mechanism for unfulfilled projects, governance and the monitoring and capture of benefits. Understanding the innovation landscape is vital to ensure value for money and ensuring that the expert entity is appropriately qualified to act in that role is imperative.

We consider that the following suggestions should be given consideration in building a successful framework:

- There should be an emphasis on a partnership approach to applicants and potentially, with appropriate and strong sponsorship from water clients (to show there is future demand), the fund should be accessible directly by the supply chain in addition to water companies;
- Development of robust tests to ensure that proposals are not essentially incremental and something companies would otherwise explore or invest in. It is important, however, not to disadvantage those companies that have demonstrated full transparency through the PR19 process against those that may have retained a number of options or initiatives that could now be presented as "new";
- Criteria to evaluate additional customer value for money, and to ensure that customers do not pay twice for the same benefit, either in the delivery and outperformance of performance commitments or in-period efficiencies;
- Ensuring that the project costs, including project management are efficient with robust cost recovery mechanisms to protect customers for low quality delivery;
- Any award should fairly recognise the effort by the lead company - including the additional financial risk taken - ensuring there is no financial advantage in companies not participating and adopting a "fast follow" strategy. Companies that choose not to lead on projects and not contribute their share of resources must not be advantaged by being allowed immediate access to the innovation and the benefits that brings. Otherwise, far from encouraging innovation, a 'watch and wait' approach would inadvertently be encouraged;
- The fund should provide fair and proportionate support for those companies taking an innovation lead, with a higher matched contribution to ensure first movers are not disadvantaged; and
- Consideration should also be given to the principles of the World Water Innovation Fund where companies can "buy in" as an observer to the project. Options to co-develop the scope and ensure output usability could also be considered. This approach could potentially increase the overall size of the pool available for innovation.

In addition to the framework for the competition, governance and transparency of reporting will also be a critical enabler to the success of the competitive fund. Customers have consistently told us that they expect companies to innovate but in doing so also expect us to be honest with the failures as well as the successes. It should therefore still be recognised that even the highest quality innovation projects can fail, but that there are still benefits to customers across the sector from a "fail once and learn" approach, rather than having all companies failing individually.

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Q:5 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?

We consider that Ofwat has correctly identified the risks associated with an end-of-period innovation reward. Ideally, funding for "roll outs" should be largely restricted to cases where the company can demonstrate that the funding is strictly necessary in order to facilitate the roll out within the given timeframe and that the same result would not have been obtained without the reward. However, if the reward is to be allocated on a backward looking basis at the end of the period, then clearly this would not be possible.

We therefore suggest that – if it is taken forward – the size of any end of period rollout reward should be modest in the overall context of the up to £200 million fund.

Q:6 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?

Additional mechanisms – Although outside the scope of this consultation, we would support the UK Government considering extending its £10 million "Pioneer Fund" to encourage regulators to look further at industry-wide initiatives which could provide additional customer benefits. An extension of the fund may also encourage regulators to work together on common areas of interest to help deliver broader cross-sector benefits. If this additional fund is made available we think a coordinated approach which includes collaboration from the water industry should be considered to harness benefits for water customers across England & Wales.

Combination of mechanisms with proportionate funding – Each of the activities and funding mechanisms could serve to support the exploration and uptake of innovations across the sector to benefit many customers beyond regional boundaries. However, there are risks to all the proposals and some will be easier to mitigate than others. It is our view that incentives would be best targeted at major issues of broad relevance to all water companies where knowledge is currently limited. In this context, a centre of excellence approach might well deliver a good value for money approach.

Across the sector there has already been good examples of collaboration and innovation to tackle sector wide issues, although there is more that could be done. An example of this proven value from a collecting funding and collaborative approach to innovation is the UKWIR co-ordinated Chemical Investigations Programmes Phase 2 (CIP2). When considering trace substances in surface waters and meeting the challenge of achieving future environmental quality standards (EQSs) for a wide range of chemicals, water companies and regulators alike have come together to collaborate, share effort and expertise. The benefits of such a collaborative approach have resulted in data set revealing statistically significant trends that, if considered discreetly by individual companies, would simply have not been identified. Having regulators in the partnership has resulted in the research directly influencing policy, with Defra now reviewing their source control strategy having detected reductions in some chemicals with predictions that by 2027 most water bodies will become quality compliant and therefore for water companies the 'do nothing' approach is appropriate. This is also supporting the innovative catchment studies approach for intervention at source as the best value solution for customers and the environment.

We would therefore support a greater share of the proposed financial support for applications from a Centre of Excellence (or Centres of Excellence) which should still be subject to the criteria and scrutiny of the expert entity. This approach to centrally co-ordinated collaborative innovation would provide significant benefit for a number of other future drivers and emerging themes that, without alternative funding support, may otherwise not progress

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quickly enough without the significant added benefits that collaboration and open data can bring. Such issues include micro-plastics, anti-microbial resistance and the longer term impacts of climate change.

In relation to the competitive elements of the mechanism, the competition should take a higher proportion of the funding than the roll-out reward. The criteria set for competitive success can, if robust enough, ensure that companies invest in innovation to tackle the key industry wide challenges. Mindful of the barriers to innovation as set out in Section 1 - specifically concerning the competitive advantage from innovation and the potential for companies to be reluctant to share and collaborate - we would strongly recommend consideration be given to innovative campaigns to change customer behaviour, in terms of water efficiency and non-flushables. By using the competitive fund to support industry wide applications, facilitated by either an independent body or centre of excellence, this could see consistent and strong campaigns across England and Wales that would otherwise not occur through delivery of individual plans or through any current mechanisms.

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?

Sector-wide joint innovation strategy – water companies will share many of the same emerging problems and a central consensus to those problems would be beneficial to support those areas where focused collaboration would offer most value to customers. A sector-wide innovation strategy would also offer another opportunity for companies and the supply chain to collaborate on plans to address these challenges. Organisations such as UKWIR and Twenty65 are collaborating with the sector to address the big questions to 2050 and sustainable water to 2065, respectively. However, having a centrally coordinated view of the key issues facing the industry would complement these initiatives and could speed up the access to the innovation fund, and hence to focus and align the effort on these emerging challenges. We would welcome a joined up approach to innovation and in the long term this could provide the framework for targeting future financial support, although recognising in the near term that an independent body would be more appropriate to facilitate any competitive application process in the absence of such an innovation strategy.

Innovation in water centre of excellence – we agree with the need to collectively innovate for collective customer benefit where it is appropriate, and we also believe that there is a need to campaign nationally to address common industry challenges. Both could be best achieved through one (or more) centre(s) of excellence, not simply as a test centre, but one that draws on existing skills, resources and provides independent oversight to all bidding innovation initiatives and collaborations.

A central innovation hub could also be instrumental in bringing together the industry to establish a sector wide joint innovation strategy as set out above, whilst providing the platform for enabling open data and testing.

Q:8 Do you think the proposals in section five will help drive innovation? Are there other activities not identified which you think Ofwat should be considering?

Throughout the proposals, Ofwat has recognised that increasing coordination on innovation is essential to unlock increased value for customers and this is true also for the coordination across regulators. Increasing coordination across sectors supports innovations where interpretation of regulations or influence of policy and strategy is required, akin to that seen in the Regulators' Alliance for Progressing Infrastructure Development.

The Environment Agency (EA) and Drinking Water Inspectorate (DWI) have already been helpful in encouraging innovative developments. For example, we have worked closely with the EA and other stakeholders and engaged with customers to develop and apply integrated catchment management. Working with the EA we have developed,

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and are implementing, a new form of regulatory permit which involves catchment permitting and nutrient trading. Through this approach we will deliver our fair share of nutrient reduction, partly through interventions at our wastewater treatment works, and partly through wider catchment measures. This integrated approach to catchment management and close engagement with the EA has resulted in us working together to create a new way of permitting, enabling us to innovate and deliver more benefit for the customer and the environment. We believe such beneficial collaborative working in the area of flexible consenting can be expanded and there is more potential for regulators to work with industry to help unlock further innovative opportunities.

The use of a central partnership to provide a single point of contact for companies and third parties alike, would allow innovators to understand, modify innovations or influence regulators to support success where complexities occur in relation to drinking water quality or environmental quality regulations.