Innovation funding and competition: further consultation on design and implementation



About this document

In our new strategy, Time to Act, Together (October 2019), we highlight that innovation is crucial for meeting the challenges we face in a cost-effective and sustainable way. Our price review framework already promotes innovation by setting water companies stretching outcomes and allowing them the flexibility to adopt innovative means of delivering, and we are encouraged to see some companies demonstrate real ambition in this space.

But there remain significant untapped opportunities for the industry to work together, with the supply chain and those in other sectors to trial and adopt new practices and technology to transform performance. Existing initiatives need to be streamlined so that efforts are complementary rather than duplicative, learning is shared, and technology that is proven to work can be easily adopted across the industry.

In December 2019, we explained our decision to make up to £200m of additional funding available for the next regulatory period (2020-2025) for innovation in the water sector. Through the introduction of innovation funding and an innovation competition, we aim to drive collaboration across the water sector and beyond. Funding will be targeted at tackling key strategic challenges such as climate change.

In this document, we seek views on outstanding policy issues, and explore options for the detailed design and implementation of the innovation funding and competition. We also provide a brief update on other complementary activities, such as the joint sector innovation strategy which we have asked the water companies to lead on, and the trialling of a One-Stop-Shop to provide regulatory advice and support to innovators looking to get innovative activities off the ground.

We recognise that these are challenging times for all, and our priority is to support and challenge the water sector in ensuring all customers receive reliable water and waste water services. The current COVID-19 pandemic reinforces the important role innovation can play in addressing global challenges. With that in mind, we are still aiming to launch the first round of the innovation competition in winter 2020, so as to start delivering the intended benefits for consumers and the sector as soon as possible. We will continue to closely monitor the situation and we may revise our timeline and approach to this innovation package in light of the on-going COVID-19 restrictions and impacts. In particular, we note that some stakeholders may struggle to respond to this consultation in time for the given 24 June 2020. Please do let us know as soon as reasonably practicable if that is likely to be the case.

Contents

| 1. | Outstanding policy issues | 8 |
|-----|---|----|
| 2. | Design and implementation of the competition | 20 |
| 3. | Update on complementary activities | 28 |
| Anı | nex 1 – Overview: innovation competition and funding | 34 |
| Anı | nex 2 – List of consultation questions | 35 |
| Anı | nex 3 – Pilot year: indicative timings | 37 |
| Anı | nex 4 – Examples of innovation funds and challenges in the UK | 38 |

Introduction

Background

In December, we outlined our decision to make to up to £200m of customer funding available for the period 2020-2025, and to hold a collectively-funded innovation competition at least once a year.

We also said that in the next phase of work we would:

- Define a clear and robust set of rules to ensure the competition benefits customers today and tomorrow.
- Consider how to administer the process efficiently and in a way that allows fair participation across the board.
- Involve independent experts from different fields in the decision-making process so that we only fund genuine innovation.
- Take a proportionate approach to decision-making, with Ofwat retaining strategic control over the innovation competition.

In this document, we seek views from our stakeholders on a number of key outstanding policy issues. We also seek views on how funding can be use and our proposals for the design and implementation of the competition. Finally we provide an update on other parallel activities designed to complement the innovation funding and the competition.

Now more than ever, the water sector needs to find new ways of delivering for customers and demonstrate their commitment to public value. Innovation, not just in technology, is an imperative. We think it is therefore important that we continue with our programme of work on innovation. However, our priority remains protecting customers. In considering next steps on the activities we outline in this document, we will take into account on-going COVID-19 developments. Consequently, we may revise our approach and timelines, consulting stakeholders as appropriate, to best assure the success of the fund's aims in these challenging times.

Associated documents

- Ofwat Decision on driving transformational innovation in the water sector (December 2019)
- Ofwat Draft PR19 reconciliation models
- Ofwat Consultation on the PR19 Reconciliation Rulebook (closed 29 April 2020)

Our overarching aim

In our December decision document, we identified three key barriers to innovation in the water sector. We highlighted the need for a shift in company culture and more effective joint working, and a general perception that the current regulatory framework does not sufficiently encourage innovation, particularly in the context of the clear public health and environmental obligations companies must comply with. Finally, global strategic challenges like the climate crisis and population growth means it has become even more urgent for water companies to innovate in order to continue delivering safe, reliable and affordable water supplies for all.

The introduction of innovation funding and an innovation competition can help address these barriers. By targeting transformative innovation designed to address key strategic challenges, and emphasising the need for stronger collaboration and partnership across the sector and beyond, we believe innovation funding and the innovation competition will help accelerate change.

In December 2019, we published a set of innovation principles that would help safeguard customer interests. These principles will help ensure we fund only transformational innovation that water companies would not otherwise explore or invest in. They also highlight that innovation goes beyond just the development of new technologies and encourage water companies to put forward a wide range of innovation proposals, addressing the big challenges facing the sector and taking into account the strategic priorities and objectives of the UK and Welsh governments. Finally, they will require the seventeen water and wastewater companies to demonstrate their commitment to work better together, with their supply chain, and with wider stakeholders.

But we will not drive innovation through the competition and targeted funding alone, and we are therefore introducing a number of complementary activities:

- Joint innovation strategy: we firmly believe that strong sector leadership is central to embedding a culture of innovation. We have asked the seventeen regulated water and wastewater companies in England and Wales to develop a joint innovation strategy, which we think will be key to sustaining innovative activities in the longer-term. Our view is that this strategy should also help improve the companies' engagement with innovators and wider stakeholders. We are pleased to see that the companies have taken up the challenge and are making progress on a first draft of the strategy.
- **Innovation 'one-stop-shop':** we aim to trial an innovation one-stop-shop in the coming year. The one-stop-shop could provide assistance to innovators seeking to better understand what our rules and regulation mean for them.

We will be seeking views on potential one-stop-shop activities separately to this consultation document.

We believe that we all have a role to play. Together, through these complementary activities, we can set ourselves up more effectively as a sector to deliver innovation and face up to the challenges of tomorrow.

Outstanding policy issues

In Section 1 we seek views on a number of outstanding policy issues related to the innovation funding and competition, which we noted in our December 2019 decision would require further consideration. These include intellectual property rights (IPR), risk sharing, and partnership and collaboration with third-parties.

We are also proposing minor changes to the principles to reflect the evolution of our policy set out in this document, for example around minimum contributions and sharing risks with customers.

Design and implementation

In Section 2 we outline more detailed proposals for how the innovation funding can be used and the design and implementation of the innovation competition. We explore our proposed approach to the first year of the competition (2020-21), which will involve piloting:

- An Innovation in Water Challenge: targeted at smaller transformative projects, with a strong focus on supply chain participation;
- A main competition: targeted at larger strategic collaborative projects;
- Potential funding for enabling activities.

We illustrate how the different components interact in Annex 1 – Overview: innovation competition and funding.

We also provide further information on how we plan to run the competition, including timings, governance, and decision-making.

Our plan is to appoint an organisation to help implement the innovation competition, to provide technical expertise in innovation in the shape of an independent expert panel, and administrative support in the delivery of the competition. This will help

ensure projects funded deliver genuine value for customers and that the competition is efficiently run.

Update on other activities

Finally, in Section 3 we provide an update on other activities. In particular, we provide additional information on what, in our view, could be included in a joint Innovation Strategy for the sector.

We also briefly outline next steps on our commitment to trial a one-stop-shop for innovation.

Next steps

We look forward to receiving responses to this consultation by 24 June 2020 to innovationconsultation@ofwat.gov.uk. We recognise that, in the current circumstances, some stakeholders may struggle to meet our consultation deadline. Please do let us know as soon as reasonably practicable if that is likely to be the case.

We outline next steps below. Timings remain tentative at this point. We may revise timings in light of COVID-19 developments to ensure our stakeholders are able to fully contribute to relevant activities and that we continue to deliver value for customers in these challenging times.

We have been pleased to see considerable support and enthusiasm for our work on innovation. We will continue to engage with our stakeholders. We are evolving how we engage to better maximise our reach to the widest stakeholder community possible.

| Activity | Timings (tentative) |
|---|-------------------------|
| Final decision on outstanding policy issues | Q1 2020/21 ¹ |
| Tender process and appointment of supporting organisation | Q1/ Q2 2020/21 |
| Innovation competition – Year 1 set up | Q2 2020/21 |
| Innovation competition | Q3 2020 |
| Trial One-Stop-Shop | Q3 2020 |

-

¹ Based on regulatory year starting 1 April and ending 31 March.

1. Outstanding policy issues

In this section, we provide additional clarification on a number of outstanding policy issues, which we highlighted in our December 2019 decision would require further consideration before reaching a final decision on the operation of the fund. We explore issues around:

- Intellectual Property Rights (IPR) and royalties
- Open data and information
- Risk sharing
- Types of projects funded
- Protecting the innovation funding
- Partnerships and collaboration with third-parties
- Protecting customers' interests
- Interactions with the price review

1.1 Intellectual Property Rights and royalties

In our July 2019 consultation, several respondents highlighted IPR as a key issue or area of concern, and the need to ensure arrangements do not unintentionally discourage from participation in the competition. We agree it is important that we introduce appropriate arrangements for IPR, which strike the right balance between the interests of all parties. The treatment of royalties also links closely to the discussion on IPR.

We have considered the kinds of arrangements that are already in place in other similar contexts, for example Ofgem's Network Innovation Competition² (NIC) or the various catapults³.

IPR - our proposed approach

As a starting point, we propose to distinguish between Background and Foreground IPR in the context of our innovation competition:

² https://www.ofgem.gov.uk/publications-and-updates/version-30-network-innovation-competition-governance-documents

³ The Catapults are a network of world-leading technology centres designed to transform the UK's capability for innovation in areas of strength and drive innovation to promote productivity and economic growth. For further information see https://catapult.org.uk/

- Background IPR: this is pre-existing IPR, which exists prior to the submission of any bids to the innovation competition. For example this could involve a product or solution developed prior to the competition and without any competition funding. Our view is that each participant should retain all rights in and to its Background IPR, including where a bid involves more than one participant. However, an appropriate form of licence should be granted to all participants in any project, which is the subject of a bid, for the sole purpose of the project, in order to enable it to go ahead.
- Foreground IPR: this is new intellectual property that is created through a project funded by the innovation competition. To ensure all customers benefit from the innovation competition, which is collectively-funded, Foreground IPR must be made available royalty-free and in perpetuity to all seventeen water and wastewater companies and new entrant water and wastewater companies. With regards to the ownership of Foreground IPR, where a project funded through the innovation competition involves more than one participant, each project participant should own any Foreground IPR that it creates through the funded project without any input from other participants. Any jointly created IPR should be shared proportionately as agreed by the project participants. Where a participant's Background IPR is required for the purposes of using Foreground IPR, we expect a limited appropriate form of licence to be granted by the participant.

We recognise the importance of IPR, in particular for small-scale innovators. Our view is that we need to be flexible here in order to incentivise projects where more complex arrangements on IPRs may be appropriate, and to balance this with the need for clarity and consistency. Projects which make a case for alternative treatment of IPRs may be considered, but only where the bidders can set out how the project will benefit all customers of water companies through the proposed arrangements. Such alternative arrangements would be considered on a case-by-case basis and assessed against the principles through the competition process.

Royalties – our proposed approach

The discussion on royalties links closely to the issue of IPR, and we need to ensure that appropriate arrangements are in place to ensure customers benefit from royalties, where these are the result of customer-funded innovation competition projects. We are proposing to adopt default arrangements for royalties, in line with those for IPR. Under these arrangements, royalties earned through Foreground IPR

⁴ New Appointment and Variations (NAVs): NAVs are new entrant water and wastewater companies which serve end customers by becoming the local licensed supplier and replacing the existing water and/ or wastewater company (incumbent) for a specific area.

will be shared with all customers in proportion to the amount collectively funded through the innovation competition. We have made provisions for this in our Reconciliation Rulebook (see also below: Protecting customers' interests).

As with IPR, we are prepared to consider alternative arrangements. For example, in our decision document, we highlighted an example of a "revolving fund" model.⁵ We see that there are possible applications for this model for management of royalties and revenues: returning any royalties earned through Foreground IPR to the fund, increasing available fund pot or reducing customers' future contributions.

Q1: Do you agree with our proposed default arrangements for managing IPR and royalties? Do you think these arrangements work for different types of projects and activities (e.g. new technology vs. process innovation, roll-out activities etc.)?

Q2: What alternative arrangements should we be considering for IPR/royalties?

1.2 Open data and information

Open data and the innovation competition

Open data means making data freely available to everyone to access, use and share. We can see digitalisation of the water sector is starting to happen, and believe this can play a big part in driving transformational innovation. This is why we have said we would take an open by default approach to data and information generated through the innovation competition.

Open data – beyond the innovation competition

Our view is that, wherever appropriate, data on infrastructure should be open. This can help to drive innovation, as more parties get access to information, encouraging new ideas and solutions.

-

⁵ The Clean Water State Revolving Fund in the United States.

Some would argue that there may also be a perceived ethical imperative for water companies to share data where they can, and drive real, genuine public value from this data, which is ultimately funded by customers.

We also think data can help to drive partnerships between water companies and others operating in their local areas – for example, utility companies and local authorities sharing information about assets could lead to improved relationships around the management and development of infrastructure.

Many organisations who commit to this type of approach use a triage process to assess whether or not there should be any restrictions on access or use of an individual dataset. Where open data is not appropriate, e.g. due to its potential sensitive nature, the aim is to preserve the value of the dataset for as many users as possible.

We expect open data to be a key theme of the water companies' joint innovation strategy. This is discussed further in Section 3: Joint sector Innovation Strategy.

Q3: Do you agree with the principle that data generated through the innovation competition should be open by default?

1.3 Risk sharing

We want to make sure projects put forward in the innovation competition are of high quality and have the buy-in of the water companies and their shareholders. Our view remains that customers should not bear all the risk for projects funded through the innovation competition.

In our December 2019 document, we stated that we will consider introducing a requirement for companies to contribute financially to innovation competition projects. We also noted that smaller companies may not be in a position to make the same level of contribution as their larger counterparts.

Our proposed approach

With that in mind, we are proposing to introduce a guideline minimum combined company contribution of 10% of individual innovation competition bids. We note that this is in line with the company contribution required under Ofgem's NIC. However, we will enable companies to propose alternative, well justified, arrangements which demonstrate the companies' commitment to the projects as part of their innovation

competition bids. This could include through partnerships with other organisations or companies.

We are also prepared to consider different ways in which companies can demonstrate their commitment to individual projects, for example through commercial partnerships, by bringing funding from other sources to the table, or committing to a revolving fund type approach.

Q4: Do you agree with our proposed approach and that we should consider alternative arrangements beyond company contributions?

Q5: Do you agree that a guideline minimum company contribution of 10% is appropriate in this context?

1.4 Types of projects funded

We have been considering what types of projects we should fund through the innovation competition. There are a number of parameters to take into account here:

- Technology Readiness Levels (TRLs) assess the maturity of evolving technology or solutions. There are different ways in which TRLs can be defined, for example as done by The Ministry of Defence.⁶
- Scale/ financial value of projects: we may consider different proportionate arrangements for small-scale projects.
- Nature of projects e.g. new technology, new processes or ways of doing things.
- Projects that address specific issues e.g. environment, customer service, resilience etc.

Our proposed approach

Overall, we are keen to retain flexibility, so as to ensure we do not create an unintended bias towards certain types of projects or issues. We therefore propose to keep our approach under review throughout the duration of the innovation competition. Wherever possible, we would like our approach to be guided by the water companies' joint Innovation Strategy, to ensure the competition accurately reflects gaps and opportunities, as well as stakeholder needs.

Putting roll-out at the heart of the innovation competition

⁶ https://publications.parliament.uk/pa/cm201011/cmselect/cmsctech/619/61913.htm.

In our July and December 2019 publications, we noted the importance of ensuring innovative solutions are effectively rolled-out at scale. This was also a recurring theme in many of the consultation responses we received, suggesting that this is an issue that needs to be addressed. While we stopped short of introducing a backward-looking roll-out reward, we recognise the importance of designing an innovation competition which emphasises roll-out.

We expect to fund projects looking at roll-out and implementation. This is reflected in our principles for the innovation competition (see below). We are looking for other ways to place roll-out at heart of the innovation competition. For example, in setting detailed criteria for funding, we may consider the extent to which companies bidding have a plan in place for rolling out new technologies, including working with others to ensure roll-out across more than one company. Where appropriate, we may also seek ways to reward "fast followers" up-front, or target some of the funding available through the competition directly at roll-out.

We have also asked the water companies, in developing their joint Innovation Strategy to consider ways in which they could improve the sector's approach to the large-scale roll-out and implementation of innovative solutions. This could involve looking at pooling facilities for testing solutions and the development of joint testing standards to enable the efficient roll-out of proven technologies across the sector.

Q6: Do you agree with the overarching approach we set out here?

Q7: What are your views on introducing separate, proportionate, arrangements for small-scale projects? How might we define small-scale projects for the purposes of the innovation competition?

Q8: Do you agree with our proposal for ensuring roll-out is at the heart of the innovation competition? How might we reward both leaders and fast followers in?

1.5 Protecting the innovation funding

We have made clear our expectation that funding for the competition will be ringfenced and administered such that it cannot be used for other purposes. Effective ring-fencing will help ensure that customers' interests are protected and will need to occur at the following stages:

 Stage 1: when water companies collect revenues from their customers for the purposes of collective innovation funding;

- Stage 2: once all additional revenue collected from customers for the purposes of collective innovation funding has been transferred to the joint pot; and
- Stage 3: once a water company has been awarded funding under the innovation competition for the purposes of delivering a project, or where water companies have been awarded funding for enabling activities.

Our proposed approach

Stage 1: we expect companies to pay in revenue collected from their customers for the purposes of the collective innovation funding into a joint pot, as soon as reasonably practicable. We note that where a company does not pay in to the joint pot in a timely manner, there may be short-term tax implications, which we do not think customers should be liable for.

We are aware of the staggered nature of customer bill payments, and our view is that this has to be balanced with the need for the joint pot to be adequately resourced at all times. For this reason, we do not think that it would be appropriate for water companies to wait until all the additional revenues have been collected from customers before they transfer their share of the collective innovation funding for any charging year. We also do not believe that it would be fair on companies for funds to be requested at the beginning of the charging year. In our view, the appropriate time (and the one that strikes the right balance) for companies to transfer their contribution in full to the joint pot for the charging year is the beginning of the quarter in which the innovation competition is expected to run (see Annex 3 – Pilot year: indicative timings).

Stage 2: as highlighted above, we expect that funding collected from customers for the purposes of the collective innovation funding will be ring-fenced and administered such that it cannot be used for other purposes. At this stage, our preference is for the joint pot to be administered by the organisation supporting us in the delivery of the competition. However, we would consider alternative proposals from industry. We will provide more detailed modalities for both the transfer of funds by water companies to the joint pot and re-allocation back to the companies following successful bids at a later stage. We will introduce strict rules on accountability and usage of the funds before re-allocation to the companies.

Stage 3: ring-fencing of innovation funding will also be critical at the stage where a water company has been awarded funding under the innovation competition for the purposes of delivering a project, or where water companies have been awarded funding for enabling activities. We expect that funding would only be transferred after the water company has agreed to all the funding conditions. These could include, for example, clear project monitoring activities as well as requirements for the funds to

be kept in a separately identified and fully auditable bank account. This will enable us to track spending and ensure any underspends or misspent funds are returned to customers in line with the policy set out in this document (see Protecting customers' interests).

Q9: What practical arrangements should we introduce to ensure adequate ringfencing of the innovation funding?

1.6 Partnerships and collaboration with third-parties

Partnerships and collaboration are a key enabler for effective innovation. We want water companies to work more closely not only with each other, but also with the supply chain, innovators and other stakeholders, across sectors and jurisdictions (third-parties). This is one of the key principles underpinning the innovation funding and competition. It is also one of the key themes we have asked the water companies to explore in their joint Innovation Strategy.

In our December 2019 document, we explained that the seventeen regulated water and wastewater companies and new entrant water and wastewater companies⁷ will all have direct access to the innovation competition. This is to help ensure benefits of the competition flow back to those customers funding it, and ensure strong alignment between the customer needs and priorities of the sector and the focus of innovation. Enabling new entrants to access the competition is also necessary to ensure a level playing field. We decided that, in a first instance, third-parties will be able to access the competition through collaborative bids with the water and wastewater companies and new entrants. This applies to water and wastewater retailers too.

We have already been clear that we expect companies to work with others in putting together bids for the innovation competition. However, we recognise that more can be done to facilitate partnerships and access to the innovation competition, in particular for small innovators, SMEs and other players not currently involved in the water sector (third-parties).

Our proposed approach – encouraging partnerships and collaborations with third-parties

⁷ New Appointment and Variations (NAVs): NAVs are new entrant water and wastewater companies which serve end customers by becoming the local licensed supplier and replacing the existing water and/ or wastewater company (incumbent) for a specific area.

We have therefore been considering ways in which we can place partnerships and collaborations at the heart of the innovation funding and competition. In our December 2019 decision, we explained that we would run an innovation competition at least once a year. As part of that, we are now proposing to trial an Innovation in Water Challenge in the first year of the competition. This model would run alongside the main competition and potential funding for enabling activities.

The Innovation in Water Challenge would enable third-parties to pitch ideas directly to the water companies, and assist their indirect access to the innovation funding. This would follow a similar model to existing innovation challenges in other sectors, such as the Affordable Credit Challenge, the GovTech Catalyst Fund and the Seafood Innovation Fund. Please see Annex 4 – Examples of innovation funds and challenges in the UK for further information.

We will ensure that there is independent oversight of the pitching process. Successful pitches from third-parties would be awarded innovation funding and be sponsored by one or more water companies. This would mean that, while innovators would play a key role in driving projects forward, the water companies would be ultimately accountable for project delivery and management of funds. There would be clear conditions attached to funding to ensure third-parties remain key players throughout the entirety of the project.

We think this approach would help open up the competition to new market players and disruptors, who do not necessarily already operate within the water sector. It would also give smaller players an opportunity to lead on innovation projects, with the support, expertise and commitment of the water companies.

In the next section of this document, we discuss options for the design and implementation of the Innovation in Water Challenge in the pilot year (please see Design and implementation of the competition).

Q10: Do you think the proposed innovation challenge approach will help better enable partnerships and collaboration between companies and third-parties, in particular smaller innovators? Are there alternative approaches we should be considering? How can we make sure this approach works in practice?

1.7 Protecting customers' interests

In our December 2019 decision document, we highlighted that we have a duty to safeguard the interests of customers, and that we would step in where we see evidence that companies have not acted with customers' best interests at heart. For

example, this could be where companies have misspent funding or not spent it on the project it was allocated to.

We recognise that innovative endeavours will not always succeed in the traditional sense. In those circumstances, we expect learnings to be shared with others. However, we do not expect funding to be returned to customers, provided that companies have acted in the interests of customers.

Our proposed approach

We set out the circumstances under which we will be returning funding to customers in our Consultation on the PR19 Reconciliation Rulebook, which closed on 29 April 2020. We also published a reconciliation model, which details how any funding would be returned to customers.

To summarise:

- We expect all unused funds to be returned to customers, taking into account that some projects, especially those funded in the latter years of the innovation competition may require funding beyond 2025.
- We may decide to make adjustments where we have considered that funds have been misspent and/or projects have not complied with funding conditions without reasonable justification.

Please refer to the relevant consultation for further details.

Q11: Do you agree with our proposed approach to returning funds to customers? Are there any other circumstances, not considered here, under which we might consider returning funding to customers?

1.8 Interactions with the price review

The innovation funding and competition is designed to complement our existing PR19 framework. Indeed, our outcomes and total expenditure approach already facilitate innovation by giving companies the flexibility and freedom to adopt more efficient and effective means of delivering. We also set stretching outcome performance commitments and a cost efficiency challenge benchmarked to the performance of the leading companies.

As a result, we expect there to be little direct interactions between the innovation competition and Output Delivery Incentives (ODIs) or efficiency incentives. The

innovation competition will fund activities that are not funded or otherwise incentivised through the price review. However, a number of stakeholders did raise concerns about the risk of potentially underperforming on ODIs as a result of trialling an innovative solution.

Our proposed approach

While we recognise that trialling innovations could have potential impacts on outcome performance, we do not consider that these impacts will be large, as any trials will, initially at least, likely be relatively small in size to the overall company. Pursuing innovations could also produce substantial benefits to companies in terms of delivering performance commitments at lower cost. We therefore do not consider it would be appropriate to grant derogations from outcome delivery incentives, as this could erode the incentive properties of PR19. Furthermore, as highlighted above, our view is that participation in the innovation competition should not be risk free for companies. Where companies have specific and material concerns around ODIs, we propose that these would be best explored through our proposed innovation onestop-shop (see below

Other Ofwat activities).

Q12: Do you agree with our proposed approach for managing interactions with the price review?

1.9 Updated principles

We have made minor changes to our principles for the innovation funding and competition to reflect:

- Our proposed position on risk sharing described above, and the introduction of a minimum 10% contribution, unless companies can justify alternative arrangements.
- Our proposal to ensure roll-out is a key consideration in innovation competition bids, where appropriate.

The updated principles are as follows:

Innovation is not just about the development of new technologies. Innovation
can also be developed by doing things differently and having the right
systems, processes and people to support activities. 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 the UK and Welsh governments;
- 2. The purpose of the innovation competition is to drive transformational innovation that companies would not otherwise explore or invest in;
- Proposals should be just as much about the roll-out of innovations at scale as
 the early incubation of new ideas and solutions. Where appropriate, we
 expect companies to set out clear plans for rolling out innovations funded
 through the competition across their and other companies' areas;
- 4. Innovation fostered through the innovation competition must provide public value for all customers in England and Wales, although the benefits for some customers may in some cases be indirect (e.g. from the sharing of findings across the sector where projects are not successful);
- Companies will be required to demonstrate their commitment to innovation competition projects and ensure risks are appropriately shared between customers and shareholders. This could be for example through a minimum contribution of 10% of project bid costs;
- 6. The innovation competition will run during the period 2020-2025 period, though some projects may extend beyond that period. We will review the effectiveness of the competition at least at the end of the period, and as required during the period;
- 7. Companies will need to provide evidence of how they are working together and with others (including other water companies, their supply chain, companies in other sectors), and/or a commitment to transparent sharing of progress and findings with others within the sector and beyond;
- 8. There will be an open-by-default approach to data and learning generated through customer-funded activities, including where projects have been unsuccessful.

Q13: Do you agree with our proposed amendments to the principles? Are any further amendments to the principles required to reflect our approach to outstanding policy issues outlined in this document?

2. Design and implementation of the competition

In this section, we discuss our proposed approach to the design and implementation of the competition. In these uncertain times, we will need to think carefully about how we progress the innovation competition and associated activities. Our priority remains to support the water sector and protect customers through the COVID-19 pandemic. We will take this into account in reaching a final decision on the design and implementation of the competition.

2.1 Piloting the innovation competition and innovation activities (2020-21)

The first year of the regulatory period is critical to ensuring we set up the competition and framework for funding effectively in the longer-term, in a way that achieves our wider aim of driving collaboration to address key strategic challenges. It will also act as an opportunity to test out our processes, and we may review and adapt these for the remainder of the competition, based on the learnings of Year 1. Our aim for the pilot year will therefore be threefold:

- Start making a difference: we propose focusing the competition in the first year on identifying and funding solutions that are closer to commercialisation or more mature in terms of TRL. This could include smaller projects which could nonetheless be transformative and make a significant positive difference. All projects funded should still be in line with our principles.
- Informing the longer-term: we would use this first year to work with the sector to identify key themes/ issues to be addressed in subsequent years of the competition. This is also an opportunity to test out and evaluate processes to ensure the innovation competition delivers in the longer term.
- Taking steps to encourage the right culture and skills for innovation: we
 think the first year would be a good time to test out different ways of nurturing
 collaboration, not just between companies but also with the supply chain and
 wider stakeholders.

Supporting the delivery of the innovation competition

We will appoint an organisation to support the delivery of the innovation competition, with Ofwat retaining strategic control and taking a role in final approval of funding. We explore this further in the remainder of this section. We expect this organisation's role to be threefold:

- Assist in the final design of the innovation competition to ensure processes are efficient and robust:
- Provide technical expertise and advice on innovation through an independent panel of experts. The panel will issue recommendations for funding and help ensure our decision-making is robust;
- Provide administrative support in the delivery of the competition.

We will be seeking support from an independent and impartial organisation with experience of running similar processes, who will be able to demonstrate expertise in administering innovation mechanisms in other sectors and/or jurisdictions. In addition to on-going engagement with our stakeholders, earlier this year, we carried out an early market engagement exercise. This has helped us gain an advance understanding of the market, suppliers and their offerings before we go out to tender. We wanted to improve our understanding of the scope and resources required to run innovation competitions and how we could design the innovation competition in a way that best achieves our policy aims.

We invited engagement for this exercise mainly (but not exclusively) from responses to our July 2019 consultation on driving transformational innovation in the water sector, ensuring a good mix of expertise and types of organisations. This early market engagement was conducted in line with the Public Contracts Regulations 2015⁸ and in such a way as to avoid market distortion. The information presented in this consultation document ensures that all potential tender participants have access to the same information and that the process remains fully open and transparent.

Our proposal for the pilot year

We will make up to £40m available during the pilot year, across three different types of activities:

⁸ Regulations 40 and 41. Available here: http://www.legislation.gov.uk/uksi/2015/102/pdfs/uksi_20150102_en.pdf

Innovation Funding and Competition

Innovation in Water Challenge

Main innovation competition

Enabling activities

Focus: making an impact and moving at pace in collaboration with innovators

Focus: larger, strategic projects involving crosswater company collaboration

Focus: sector-wide enablers to more effectively deliver innovation

We think this approach could help ensure we see a wide range of different projects coming forward, and continue to actively encourage collaboration and partnerships between water companies and beyond.

We are also conscious that it may be difficult, in the current circumstances, for companies to pull together proposals for the main competition. We welcome views on the appropriateness of introducing the three strands of the competition all in the pilot year. Alternatively we could focus the pilot year on the Innovation in Water Challenge and the enabling activities.

We propose that any unused funding will be rolled over to future rounds. We will confirm our approach to Year 2 (2021-22) and the remainder of the regulatory period in light of lessons learnt from the pilot year. We may therefore choose to re-configure innovation activities for Year 2.

We illustrate how the different components of the competition work together in Annex 1 – Overview: innovation competition and funding.

Focus of the innovation funding

In our new strategy, Time to Act, Together (October 2019), we highlight that innovation is crucial for meeting the profound challenges the sector faces in a cost-effective and sustainable way. These include the climate crisis, more volatile weather, and population growth. Water is critical to every aspect of our lives, and we

need to make sure the sector can continue to deliver reliable, resilient and safe water that is affordable for all.

Our price review framework already promotes innovation by setting water companies stretching targets and allowing them the flexibility to adopt innovative means of delivering. Innovation funding through the three strands of activities described above is focused on going further than incremental improvements by driving transformational change to address the major long-term challenges the sector faces. It will therefore be primarily targeted on a range of major strategic themes and we may choose to focus each annual round on one or two of these. The following are our emerging view of those themes that we'd like respondents' views on. These will be refined further post consultation:

- Responding and adapting to climate change including how to meet the sector's ambition of net-zero emissions;
- Restoring and improving the ecological status of our water environments, protecting current and future customers from the impacts of extreme weather and pollution;
- Understanding long-term operational resilience and infrastructure risks to customers and the environment, finding solutions to mitigate these in sustainable and efficient ways;
- Testing new ways of conducting core activities to deliver wider public value;
- Exploring the opportunities associated with open data, stimulating innovation and collaboration, for example encouraging new business models and service offerings that benefit customers.

We have also invited the water companies to work together and with their stakeholders to identify more specific issues be potentially addressed through the innovation competition, in particular in the context of the Innovation in Water Challenge (see below: Joint sector Innovation Strategy).

Eligibility and assessment criteria

The seventeen regulated water and wastewater companies and new entrant water and wastewater companies⁹ will all have direct access to the innovation funding. We will set out more detailed eligibility and assessment criteria in advance of each round

⁹ New Appointment and Variations (NAVs): NAVs are new entrant water and wastewater companies which serve end customers by becoming the local licensed supplier and replacing the existing water and/ or wastewater company (incumbent) for a specific area.

of the innovation competition. We will allow sufficient time for participants to prepare their bids accordingly.

We expect eligibility and assessment criteria to be in line with the policy set out in our published documents and with our principles. There will be a strong emphasis on increased coordination, and partnerships or collaboration between the water companies and with wider stakeholders.

Timing and frequency of the competition

We have considered several options for the timing and frequency for making funding available under the three strands. We are proposing to run both the Innovation in Water Challenge and the main competition in the pilot year, as well as considering proposals for funding sector-wide enabling activities. We illustrate potential timings for the pilot year in Annex 3 – Pilot year: indicative timings.

Allowing innovation projects to be submitted and compete more than once a year would help maintain momentum. However, these benefits would need to be balanced against the potential additional burden of running the three different types of activities in a single year.

Innovation in Water Challenge

Earlier in this document, we described our proposed approach for enabling thirdparty participation though an Innovation in Water Challenge (see above: Partnerships and collaboration with third-parties). We are proposing to use the pilot year to test out this approach.

We have already highlighted the need for increased and improved collaboration and partnerships as central to delivering transformational innovation. Our proposal for an Innovation in Water Challenge is only one of the ways in which this can be achieved, and should be the result of an overall step-change in relationships between the water companies and the supply chain. This is discussed further in the next section of this document (see section3: Joint sector Innovation Strategy).

Under the Innovation in Water Challenge approach, the water companies would need to identify specific key challenges as part of their joint Innovation Strategy, and invite proposals for solutions to these challenges. These challenges would need to be aligned with the key themes for the innovation competition we have already identified. The water companies would need to identify a number of proposals they wish to sponsor for participation in the competition. We then expect the independent expert panel to recommend projects for funding to Ofwat, who will take a role in final

approval of funding in line with the approach to governance detailed below. Any proposal funded under this approach would need to be in line with our principles, and we would expect companies to set out plans for the roll-out of successful innovations funded in this way (where appropriate) before funding is made available.

In order to ensure that the process is fair, open and transparent, we would work with the water companies to consider the architecture that is required to facilitate interactions and collaboration with the supply chain. We would expect the water companies to consider how to bring in existing expertise in this field as part of their Strategy.

Main competition

The main competition would give the water companies the opportunity to put forward bids for larger projects to be directly funded through the competition. We expect to see bids coming forward involving partnerships and collaborations between companies, as well as with other stakeholders in the water sector and beyond.

Enabling activities

The development of an Innovation Strategy may highlight the need for the sector to undertake new activities to better enable innovation. Sector-wide enabling activities could be partly funded through the competition. For example, this could include proposals designed to improve the coordination of innovation activities and facilitate roll-out through a Centre of Excellence (see below: Joint sector Innovation Strategy), or proposals looking at implementing open data. Proposals would still need to be scrutinised following a similar process to bids for the main competition and the Innovation in Water Challenge to ensure they represent value for customers.

Q14: Do you agree with our proposed focus, major strategic themes and overall approach for the competition?

Q15: What is the appropriate split of available funding between the Innovation in Water Challenge, the main competition and enabling activities?

Q16: What are your views on the feasibility of running all three types of activities in the pilot year, and on the proposed timings in Annex 3?

2.2 Key implementation considerations

Recovering the costs of administering the innovation funding and competition

By going through an open and transparent tender process, we will ensure that competition and funding administration costs are efficient and represent value for money. We envisage that Ofwat may fund a proportion of set up costs, and that remaining costs will be collectively funded from the innovation funding.

Application process

Once appointed, we will work with the supporting organisation to design an application process for each of the competition rounds that is robust and proportionate. In doing so, we will keep in mind that projects will differ in size, nature and value, and that not all applicants will have the same amount of resources available to prepare their bids.

Assessment process and decision-making

Ofwat will retain strategic control and take a role in final decision-making for the Innovation in Water Challenge, the main innovation competition and any decision to fund enabling activities. In reaching decisions, we will take into account the recommendations of the independent expert panel. We will take a flexible approach to our decision-making, adapting the level of scrutiny we bring to the process depending on the size and nature of projects. This will help ensure we take a proportionate and efficient approach to decision-making.

We expect the organisation supporting the administration of the innovation competition and funding, and the appointed independent expert panel, to lead on processing, scrutinising and assessing bids. We will ensure that the level of scrutiny applied to bids is proportionate to the size and nature of projects put forward. The independent expert panel's main role will be to make recommendations for funding.

Monitoring

We would expect companies to work with the supporting organisation, once appointed, to develop and implement a framework to regularly monitor and periodically report on individual project performance. The reporting framework should be aligned with the water companies' Innovation Strategy, and we have asked the water companies to develop a joint framework setting out how to measure and understand innovation (see below: Joint sector Innovation Strategy). The reporting framework should also enable the identification and escalation of project risks and

issues, making sure they have appropriate mechanisms in place to address these. Finally, the final framework should consider how to apply the open-by-default principle and make information on projects publicly available.

We would take a proportionate approach to monitoring, adapting the level of scrutiny to the monitoring process depending on the size and nature of projects. We would expect the supporting organisation to monitor large projects and provide an independent review of the monitoring and performance reports produced by the companies.

Evaluation

As stated in our December 2019 decision, we will review the effectiveness of the competition at least at the end of the period, and as required during the period. We will set out the parameters for a review at a later stage. It is likely that there will be some interactions with the innovation competition project monitoring piece.

In the shorter-term, we will carry out an evaluation of lessons learnt following the pilot year, to help inform the shape and form of the innovation competition in future years.

Q17: Do you agree with our proposed approach to key implementation considerations outlined here?

2.3 Next steps

We intend to go out to tender for support in implementing the innovation competition in the summer.

We will work with the supporting organisation as soon as it is appointed to finalise arrangements for the pilot year of the innovation competition, any including eligibility and assessment criteria. We would aim to publish these in the autumn in time for a winter competition.

We will work with the water companies, as part of their joint Innovation Strategy, to consider what further arrangements might be required in the context of a potential Innovation in Water Challenge.

3. Update on complementary activities

We will not solve innovation through the competition alone. We are therefore introducing a number of complementary activities, to ensure that, as an industry, we set ourselves up as effectively as we can to deliver innovation in the longer term.

3.1 Joint sector Innovation Strategy

We all have a role to play in creating the right infrastructure and culture for innovation. And we want to see the sector taking a leading role. We have called on the water companies to come together and with their stakeholders to develop a joint Innovation Strategy to further innovation in the sector.

While the joint Innovation Strategy may interact with the innovation competition (see below) its purpose is much broader, and we would expect it to become a key tool for the water companies to coordinate innovation activities and collaborate with each other and beyond.

We are very pleased to see that the seventeen water and wastewater companies have responded positively and proactively to our call for a joint Innovation Strategy. The development of the Strategy is currently being led by UKWIR (UK Water Industry Research)¹⁰. We would encourage UKWIR and the water companies to consider ways in which to involve wider stakeholders in the co-creating to the Strategy.

Key features of the Strategy

Our current view is that the Innovation Strategy should be an opportunity for companies to:

- Define clear roles and responsibilities rethinking the current architecture and rationalising activities in this space to enable more effective collaboration and coordination;
- Identify innovation gaps and opportunities come up with a map of the innovation landscape, including new and different potential sources of funding, and opportunities across sectors;

¹⁰ https://ukwir.org/eng/leading-the-water-industry-research-agenda

 Prioritise activities that will provide significant benefits to customers and the environment across England and Wales, and possibly beyond.

In this section, we explore elements we expect to see captured in the Strategy.

Stakeholder engagement and building relationships with the supply chain

We believe that high-quality stakeholder engagement should be central to the Innovation Strategy, including with stakeholders from outside of the sector. We would expect to see proactive stakeholder engagement during the Strategy's development, but also once it has been established, to ensure it is regularly refreshed and remains relevant and reflective of stakeholder needs.

More specifically, we would also expect the Strategy to identify ways of reaching out more effectively to innovators, including those who do not necessarily already operate in the sector. This could be for example through creating a single point of contact for innovators, and ensuring access for all to transparent data and information on the challenges the sector faces and opportunities to get involved.

Improved relationships with the supply chain could lead to a number of different outcomes, including new partnerships. In some cases, additional funding may be required to enable solutions to be deployed, and companies would be able to seek support through the Innovation in Water Challenge, or the main competition.

We are calling on the sector to bring in existing expertise in this field, to help manage and facilitate interactions with the supply chain. We propose to work closely with water companies, through the development of their joint strategy, to help bring in the required expertise and ensure the right framework is in place to enable an Innovation in Water Challenge to go ahead.

Open data and understanding of innovation in the sector

As noted above, we have decided to take an open by default approach to data and information arising from the innovation competition. With other regulators, we are exploring the opportunities and risks associated with open data – and we will continue to advocate transparency and encourage water companies to adopt aligned approaches towards their data. The National Infrastructure Commission (NIC) in its report 'Data for the Public Good' points to the need for increase data sharing on infrastructure assets to drive public value. In water, very few companies have introduced open access to their datasets.

We think companies should do more across the sector to get the most out of data sharing: some of the largest benefits could be in having a consistent approach, such as common open data standards. We would encourage the water companies to explore ways of achieving consistent data across all companies that is easily accessible and could therefore provide a strong foundation for innovation and learning. Greater company coordination with the supply chain to provide consistency across data could be invaluable in delivering digitalisation of the water sector, especially when developing new platforms such as digital twins. This could also align to wider cross-industry initiatives such as the National Data Strategy.

We would like the companies to use the joint Innovation Strategy as an opportunity to reflect on the barriers they face in moving towards open data, and how they are addressing these. This seems likely to include how water companies are working with others to adopt aligned approaches to their data, including the supply chain and with other sectors.

The Innovation Strategy should also consider how the sector can develop better ways of measuring innovation. Our PR19 Initial Assessment of Plans (IAP) suggested that most companies were still in the process of developing the culture and mechanisms required to facilitate effective innovation and collaboration. We think the Innovation Strategy is an opportunity for the companies to develop a joint framework for measuring and understanding innovation, building on similar existing frameworks in other sectors (e.g. energy). We would anticipate this piece of thinking would to feed into the development of a monitoring framework for the innovation competition.

Encouraging the large-scale roll-out and implementation of innovations

The large-scale of roll-out and implementation of innovative solutions has been regularly identified as a key issue in our engagement with stakeholders. We would like the water companies, in developing their joint Innovation Strategy, to consider activities that might facilitate at-scale testing and enable the swift deployment of new solutions by all water companies.

We would also encourage the Innovation Strategy to consider ways in which the sector could develop a sustainable and long-term approach to innovation, for example through the introduction of a revolving fund mechanism.

Interactions with the innovation competition

The Innovation Strategy will be important in the context of the innovation competition. We would expect this strategy to be substantially in place and command

broad based support before we formally launch the competition in the pilot year, and there are a number of ways in which we think the Strategy will interact with the competition.

Firstly, as highlighted in the previous section, the Strategy could **inform potential themes and areas of focus for the competition** beyond the key strategic themes we identify in this document. This would be particular relevant in the context of the Innovation in Water Challenge. For the main competition, we would also expect companies to consider how potential projects fit within the wider Strategy when preparing their bids.

Secondly, any proposals relating to enabling activities would need to be fully justified through the Strategy. For example, in our December 2019 decision document, we considered the potential for an innovation in Water Centre of Excellence, which we believe could be a powerful means of coordinating activities in this space across different and existing players in the sector, and could, in the longer-term, act as a first point of contact for innovators seeking at-scale testing of their solutions. There may be other enabling activities that the sector wishes to consider, for example around open data. In identifying activities, we would urge the water companies to think carefully about the number of existing initiatives in this space, identifying synergies and/ or rationalising as appropriate.

Finally, we would like the water companies to start thinking about the **practicalities** of putting forward project proposals involving more than one participant and, as part of the strategy consider developing standard arrangements.

Update from the water companies – joint Innovation Strategy

Water companies in the UK and Ireland have come together, in response to the Ofwat proposal for a collectively funded innovation competition, to deliver a joint Water Sector Innovation Strategy involving their key stakeholders. The Strategy will identify the key challenges of the sector and provide an initial focus on activities that will deliver tangible benefits for customers and the environment. It will address strengths, weaknesses and gaps in innovation; informing the scope of a future 'Centre of Excellence' and targeting innovation competition activities.

Approach

Innovation representatives from 19 water companies across the UK and Ireland, facilitated by UKWIR, have collaborated to establish a delivery structure for the development of the strategy. The structure consists of five sub-groups and a steering group. The sub-groups are responsible for delivering outputs against each of the five key areas: strategic principles, focal themes and metrics, stress testing the strategy, communications, and a systematic approach to a "Centre of Excellence".

Key activities

Arup has now been appointed to work collaboratively with the water companies to coordinate the development of a draft strategy by June 2020. Over the coming weeks Arup and the subgroups will lead several multi-stakeholder engagements involving a wide range of representatives from water companies, academia, supply chain and other industrial sectors.

Opportunities to get involved

Our stakeholders will play a key role in shaping – and collaborating to deliver - our joint innovation strategy. We are planning a variety of engagements with stakeholders to inform our thinking through the development of the draft strategy, and during the month of June the industry is planning to consult widely on an initial draft of the strategy. Further information will be available shortly.

3.2 Other Ofwat activities

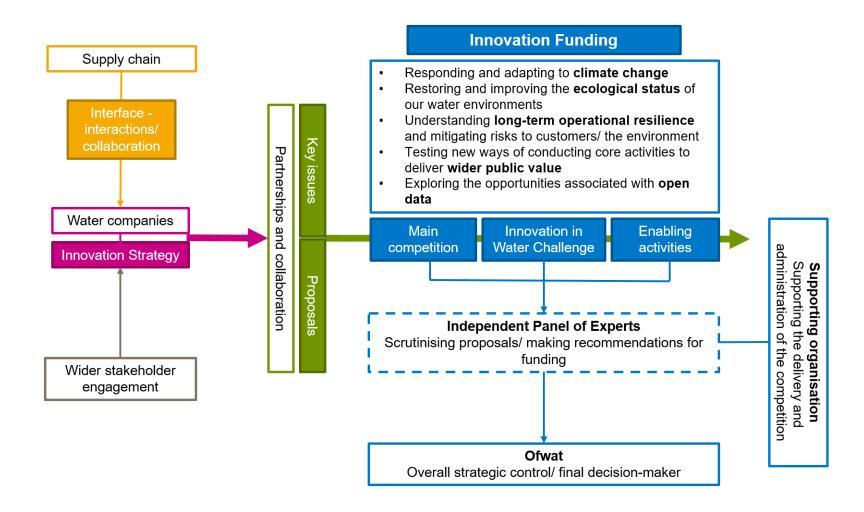
We are also thinking about what more we can do as a regulator to further enable innovation. In our new strategy, we committed to trialling a one-stop-shop. We think such a one-stop-shop could have two core roles:

- Providing regulatory advice to innovators trying to get new ideas off the ground in the water and wastewater sector, and looking to understand what our rules and regulation mean for them.
- Working with other regulators, to explore regulatory barriers to innovation in the sector, helping to inform the development of a future regulatory framework which continues to encourage and enable innovation.

Separately to this consultation, we will be seeking views on the activities stakeholders would like us to consider undertaking as part of a one-stop-shop.

.

Annex 1 – Overview: innovation competition and funding



Annex 2 – List of consultation questions

We welcome your response to this consultation by close of business on 24 June 2020. **Respondents are strongly encouraged to provide details of the evidence and data in their responses**, which support their positions to enable us to understand more fully the basis on which those conclusions have been reached.

There is no obligation to respond to all of the questions but we would appreciate if respondents could use the appropriate question numbers in submissions to enable easier analysis.

Please email your response to Innovationconsultation@ofwat.gov.uk or post them to:

Innovation consultation Ofwat 21 Bloomsbury Street London WC1B 3HF

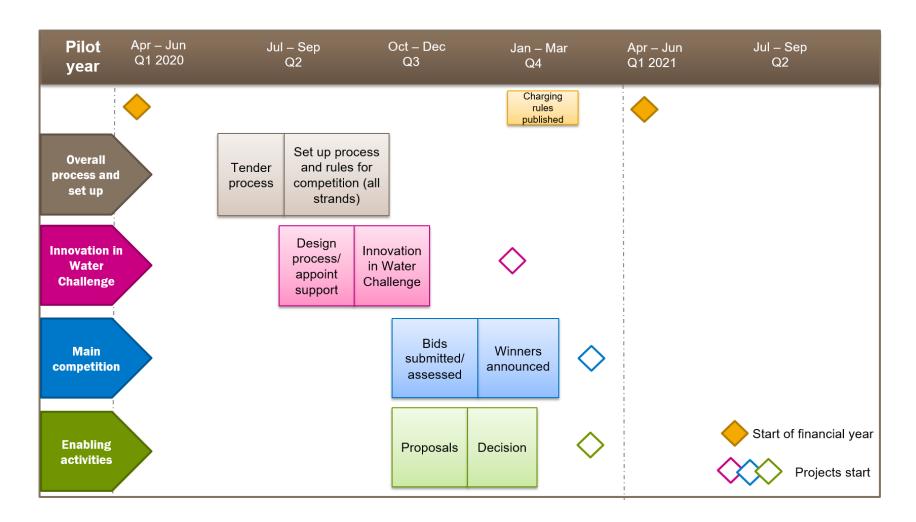
We will publish responses to this consultation on our website at www.ofwat.gov.uk, unless you indicate that you would like your response (or any identified part of it) to remain unpublished. Information provided in response to this consultation, including personal information, may be published or disclosed in accordance with access to information legislation – primarily the Freedom of Information Act 2000 (FoIA), the Data Protection Act 2018 and GDPR and the Environmental Information Regulations 2004.

If you would like the information that you provide to be treated as confidential, please be aware that, under the FoIA, there is a statutory 'Code of Practice' which deals, among other things, with obligations of confidence. In view of this, it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information, we will take full account of your explanation, but we cannot give an assurance that we can maintain confidentiality in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on Ofwat.

Consultation questions

- Q1: Do you agree with our proposed default arrangements for managing IPR and royalties? Do you think these arrangements work for different types of projects and activities (e.g. new technology vs. process innovation, roll-out activities etc.)?
- Q2: What alternative arrangements should we be considering for IPR/ royalties?
- Q3: Do you agree with the principle that data generated through the innovation competition should be open by default?
- Q4: Do you agree with our proposed approach and that we should consider alternative arrangements beyond company contributions?
- Q5: Do you agree that a guideline minimum company contribution of 10% is appropriate in this context?
- Q6: Do you agree with the overarching approach we set out here?
- Q7: What are your views on introducing separate, proportionate, arrangements for small-scale projects? How might we define small-scale projects for the purposes of the innovation competition?
- Q8: Do you agree with our proposal for ensuring roll-out is at the heart of the innovation competition? How might we reward both leaders and fast followers in this space?
- Q9: What practical arrangements should we introduce to ensure adequate ring-fencing of the innovation funding?
- Q10: Do you think the proposed innovation challenge approach will help better enable partnerships and collaboration between companies and third-parties, in particular smaller innovators? Are there alternative approaches we should be considering? How can we make sure this approach works in practice?
- Q11: Do you agree with our proposed approach to returning funds to customers? Are there any other circumstances, not considered here, under which we might consider returning funding to customers?
- Q12: Do you agree with our proposed approach for managing interactions with the price review?
- Q13: Do you agree with our proposed amendments to the principles? Are any further amendments to the principles required to reflect our approach to outstanding policy issues outlined in this document?
- Q14: Do you agree with our proposed focus, major strategic themes and overall approach for the competition?
- Q15: What is the appropriate split of available funding between the Innovation in Water Challenge, the main competition and enabling activities?
- Q16: What are your views on the feasibility of running all three types of activities in the pilot year, and on the proposed timings in Annex 3?
- Q17: Do you agree with our proposed approach to key implementation considerations outlined here?

Annex 3 - Pilot year: indicative timings



Annex 4 – Examples of innovation funds and challenges in the UK

There are many examples of innovation funds and challenges in different sectors in the UK. In this annex, we provide a brief overview of three examples of these competitions. We have chosen three examples which have informed our thinking by bringing to the fore the different ways in which such competitions can be delivered. These are:

- 2. Affordable Credit Challenge
- 3. GovTech Catalyst Fund
- 4. Seafood Innovation Fund

Affordable Credit Challenge¹¹

This Challenge aims to widen people's access to responsible, affordable credit provided by community lenders. It supports partnerships between community lenders and financial technology (fintech) providers who are working together to address challenges or opportunities faced by community lenders. It is backed by HM Treasury and delivered by Nesta Challenges.

The Challenge accepts joint applications from partnerships which must comprise at least one UK community lender and at least one fintech provider. Partnerships have to meet a set of eligibility criteria before their applications are considered.

An Expert Judging Panel is appointed to advise HM Treasury in the selection of winning participants. The process comprise two stages. At the first stage, the Judging Panel recommends up to six participants to receive development grants of between £125,000 and £150,000 to support their participation in the Challenge. At the second stage, from the six first stage participating partnerships, three winning partnerships are selected to receive cash prizes of at least £200,000 each for developing innovative solutions that make credit more accessible and affordable.

The Judging Panel's recommendations is based on an assessment of the entries against the following three categories, with respective weights:

- Impact and Innovation Stage 1 40%; Stage 2 33%
- Technology, Capabilities and Commitment Stage 1 40%; Stage 2 33%

_

¹¹ https://affordablecreditchallenge.com/

Ongoing Commitment and Sustainability – Stage 1 20%; Stage 2 33%

The three prize winners were announced recently.

GovTech Catalyst Fund¹²

The GovTech Catalyst is a £20 million fund to help solve public sector challenges with the help of innovative digital technology. The following public sector organisations can apply for funding:

- UK central government organisations
- devolved administrations
- local public sector organisations

While businesses and academic institutions can't apply for funding, they can be a supplier.

In order to be considered for funding, the public sector organisations must describe a current public sector service or policy delivery problem which:

- has no current solution
- needs an innovative digital solution
- will bring better public services or reduce costs

They must also be willing to buy the digital solution at the end of the process.

The GovTech Catalyst team and a cross-government assessment panel of senior officials initially assess all challenges. Five are selected and are sent to the GovTech Catalyst Steering Group and ministers for approval.

There are seven stages in the process from submission of challenges to the procurement and adoption of solutions. These are captured in the table below.

_

¹² https://www.gov.uk/government/collections/govtech-catalyst-information

GovTech Catalyst Fund¹³

| Stage | Activity | What happens |
|-------|---|--|
| 1 | Challenge is submitted | Applications are open, anyone in the public sector can submit a challenge they need help to solve. |
| 2 | Challenge is selected | Challenges are selected based on a selection criteria. |
| 3 | Phase 1: finding suppliers to work on the challenge | Suppliers are invited to pitch innovative solutions to each challenge. Successful suppliers get funding from the GovTech Fund to develop their solutions. The public sector team picks the winning suppliers from a shortlist created by Innovate UK. |
| 4 | Phase 1: building a prototype | The public sector team supports the suppliers to build a functioning prototype which explores the technical and commercial feasibility of the project, showing how a solution can meet the user needs. |
| 5 | Phase 2: evaluation | Some phase 1 challenges (usually 2) receive additional funding to further develop a working proof of concept. |
| 6 | Phase 2: implementation | Produces a product or service that the public sector team has tested in an operational environment and is confident will help to address user needs. It may not be possible for all projects to have a working prototype by the end of phase 2. But it must be at a point where it could pass a beta assessment. |
| 7 | Procurement and adoption | The public sector team must intend to procure any successful phase 2 solutions; this may not happen immediately. |

As at 7 January 2020, the GovTech Catalyst has funded 15 public sector challenges – five each were selected over three funding rounds.

- Funding round 1 opened from 18 January 2018 to 19 February 2018
- Funding round 2 opened from 21 May 2018 to 25 June 2018
- Funding round 3 opened from 9 October to 12 November 2018

Seafood Innovation Fund¹⁴

This is a £10 million fund to support projects, ideas and technologies that aim to disrupt the seafood sector. It is administered by the Centre for Environment, Fisheries, and Aquaculture Science (Cefas) on behalf of Defra.

¹³ Source: https://www.gov.uk/guidance/how-govtech-catalyst-works

¹⁴ https://www.seafoodinnovation.fund/

The programme offers EU and UK based public and private organisations the chance to bid for up to £50,000 for feasibility studies, or up to £250,000 for full R&D projects which can run for up to 18 months.

Calls for applications are widely advertised and open periodically throughout the 3-year programme.

Projects must fall under the following 6 priority areas:

| Sustainability: | to reduce the environmental impact of seafood |
|-----------------|---|
| Innovation: | technologies to bring the industry into the 21st century |
| Productivity: | ensuring seafood security for years to come |
| Collaboration: | creating new partnerships across the seafood and tech sectors |
| Management: | strengthening the evidence base for sustainable management |
| Risk reduction: | to improve future certainty for seafood business |

After applications close, a steering group comprising representatives from the fisheries, aquaculture, academic, regulatory and innovation sectors reviews the applications and makes recommendations for funding to the Fund Executive Board. Applicants are notified of the outcome approximately three months after the competition closing date. Unsuccessful bidders may be able to reapply in the following call provided they have addressed any suggested amendments in the feedback.

The first successful fund projects were announced on 2h January 2020. Just over £3m was awarded to 26 UK innovation projects. The successful applications represent 36% of the projects that applied, and between them received 31% of the total funding requested during this call. The projects include 14 shorter feasibility studies (£430k) and 12 longer R&D projects (£2.74m).

Ofwat (The Water Services Regulation Authority) is a non-ministerial government department.

We regulate the water sector in England and Wales.

Ofwat Centre City Tower 7 Hill Street Birmingham B5 4UA

Phone: 0121 644 7500 Fax: 0121 644 7533 Website: www.ofwat.gov.uk Email: mailbox@ofwat.gov.uk

May 2020

© Crown copyright 2020

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit nationalarchives.gov.uk/doc/open-government-licence/version/3.

Where we have identified any third party copyright information, you will need to obtain permission from the copyright holders concerned.

This document is also available from our website at www.ofwat.gov.uk.

Any enquiries regarding this publication should be sent to us at mailbox@ofwat.gov.uk.

