

Ofwat Innovation Funding and Competition - May 2020 consultation
Response from Nesta
24 June 2020

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.)?

We appreciate that defining a policy in particular with respect to Foreground IPR is challenging.

There is some tradeoff here between stimulating and disseminating innovation. Stronger IPR rights for the innovator create stronger incentives to create IP in the first place, but at (some) cost to dissemination of the IP. Given that the innovation competition is funded with all water customers' money this perhaps points to tilting the balance in favour of dissemination, as in the default arrangements proposed for Foreground IPR.

The proposed default - that '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' - seems to us straightforwardly correct with respect to the water companies' Foreground IPR. This is consistent with the objectives of the competition and should have limited effect on water companies' incentives to create IPR given that these do not operate in a competitive marketplace.

But we expect the proposed default would serve as a significant deterrent for third party innovators to participate in the competition. The issue here is less business size than the fact that these businesses will generally be operating in competitive markets where IPR is an important source of competitive advantage - likely more important for businesses that are more capable of generating the kind of IPR that could bring about transformative innovation in the water sector. We doubt that such businesses will in general be prepared to offer up their IPR in this way, even where the investment costs are (partially or wholly) covered by the competition. Conversely, the innovator has an incentive for its IPR to disseminate widely where it is compensated for doing so, for example through royalties.

As a practical matter, we are also not confident that the proposed default for third party innovators' Foreground IPR would be enforceable. It would require the ability to distinguish Foreground IPR created as a result of the competition.

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

The default in most UK government-funded innovation grant programmes or competitions, funded from general taxation, is that IPR remains with the business creating the IPR - for example, we understand this to be the case in general for UK Research & Innovation grants.

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¹ See for example <https://epsrc.ukri.org/funding/applicationprocess/basics/ip/>

The competition envisages third party innovators becoming involved through partnerships with water companies, so an alternative default arrangement for third party innovators' Foreground IPR would be for it to be made available to all water companies on the same terms as it is made available to the water company with which the third party is partnered. This would preserve a strong incentive for the creation of the IPR in the first place, while ensuring the partner water company secured no financial advantage relative to other water companies in relation to the IPR.

On our reading Ofgem's Network Innovation Competitions incorporate more flexible arrangements for IPR than those proposed - for example, 'foreground IPR within Commercial Products is not deemed Relevant Foreground IPR'.²

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

Yes.

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

Yes.

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

We would recommend a higher contribution - perhaps 20% - as 10% seems low to create a genuine alignment of incentives between the water companies and the innovation competition. Based on our experience we expect proposals to gravitate towards whatever minimum contribution is set, in particular if the competitive pressure in the process is limited.

We believe the appropriate level of contribution for any particular project should depend on the riskiness of the project - if the project is low risk (for example, is focussed on disseminating an innovation that is well established elsewhere) we would expect the company contribution to be higher. So the application process should place particular focus on the types and degrees of risk individual projects entail.

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

Yes.

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?

² Ofgem, Electricity Network Innovation Competition Governance Document v.3.0 (June 2017), paragraph 9.14.

We would not recommend having separate arrangements for smaller projects as any boundary line between 'large' and 'small' projects will almost certainly be arbitrary. We would propose that the application and monitoring process is sufficiently flexible as to reflect the size (and therefore financial risk) associated with different kinds of project.

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?

We would recommend that the competition strike a balance between roll-out and piloting of innovations. The innovation competition is seeking to drive 'transformational innovation' in the water sector, and sometimes this will require supporting genuinely new products or processes before knowing whether the innovation can or should be disseminated. As section 1.8 of the Consultation notes, the expectation is that the impact from the 'trailing' of innovations supported by the competition will be small at first.

Relating to Q5, for proposals to support the roll-out of innovations that are already well established elsewhere we would expect the water company to contribute a greater share of costs than for more innovative, higher risk projects.

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

We agree with the approach proposed in the consultation document.

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?

We are strongly supportive of the proposed Innovation in Water Challenge (IIWC).

We agree that a separate competition channel focussed on engaging third party innovators - the proposed IIWC - will be desirable and likely necessary to achieve the overall competition's objective to stimulate innovation collaborations between water companies and third parties. Every thriving innovation ecosystem with which we are familiar involves many different types of player and an openness to new entrants. While there are structural constraints on such openness in the England and Wales water sector we believe that a key objective for the competition should be to stimulate greater third party engagement.

We recommend that the door is left open to this Challenge happening beyond the first year of the competition. We further recommend that in the first year funding is skewed towards IIWC, reflecting the weaker incentives water companies have to engage in this Challenge.

In open innovation competitions such as the proposed IIWC the innovators pitching their proposed solutions to defined problems would typically be funded directly by the competition,

through a mixture of up front grants and outcome-contingent prizes. A bespoke design will be required if the funding flows instead through the water companies. We expect that, suitably designed, IIRC could be highly impactful and catalytic in its effect on third party innovator engagement with the water sector.

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?

Yes.

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

Yes.

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?

In general yes, subject to the points made elsewhere in this response.

In principle 4 we suggest that the emphasis should be on the potential for public value for all customers in England and Wales. For genuinely innovative activity it will generally not be possible to know in advance that it will generate value for all customers.

In principle 6, we recommend in particular that there is a review point towards the end of year one to inform the structure of the competition in year two and beyond.

We would recommend strengthening principle 7, to make increasing the input of third party innovators to the water sector in England and Wales an explicit objective of the innovation competition.

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

In terms of overall approach to the structure of the competition, we suggest the following:

- All three proposed strands - Main Competition, IIRC and Enabling Activities - should run in a year one pilot year.
- The Main Competition in year one should focus on 'shovel-ready' innovation opportunities that can demonstrate impact within year one.
- The year one Main Competition funding pot should be small relative to the year one IIRC funding pot.
- Whether IIRC runs in year two should be contingent on the progress demonstrated by IIRC in year one, to be determined by Ofwat. Whether it runs in years three to five should likewise be contingent on the performance and determined by Ofwat.

- We recommend that Ofwat consider longer periods for the execution of funding projects later in the competition - for example running two one year competitions followed by two 18 month competitions. Based on our experience, once account is taken of application and assessment processes, 12 months is a short period of time for genuinely transformative innovations. While 12 months may be appropriate in the early stages of the competition when project risks are high, in the later stages the impact of the competition could be increased by having longer periods for project execution.
- Where different competition strands (Main Competition, IIRC, Enabling Activities) are running concurrently, we recommend that these operate to broadly the same timetable (and in particular to the same end point) to facilitate synergies between the strands and efficiency in assessment processes.

Subject to earlier responses we agree with the focus on the competition, but would put more weight on engagement with third party innovators. We agree with the proposed major strategic themes.

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

We recommend that Ofwat consider weighting competition funding more towards the later stages of the competition and away from the earlier stages, reflecting the greater risk inherent in the competition at the earlier stages as competition participants adapt to the competition model.

As noted above, we recommend in the first year that funding is weighted towards IIRC. If Should IIRC continue in later years funding may rebalance towards the Main Competition.

We expect that funding for enabling activities should be small relative to those for IIRC and the Main Competition, and that priority should be given to enabling activities that are not reliant in the long term on competition funding.

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?

We believe that all three types of activities can and should be run in the pilot year, and that evaluation of the success of these activities should inform the competition structure to be implemented in later years.

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

Yes.

We expect that it will be helpful for the independent expert panel to include not only technical water sector expertise but a wide range of perspectives relevant to the water sector and

water customers. It should receive technical due diligence and other support to aid its decision-making, coordinated by the supporting organisation.