

AECOM Limited
5th Floor, 2 City Walk
Leeds LS11 9AR
United Kingdom

T: +44 (0)113 391 6800
aecom.com

Project name:
Innovation Consultation

Project ref:
XXXX

From:

Date:
22 June 2020

To:
Ofwat
Centre City Tower
7 Hill Street
Birmingham
B5 4UA

CC:



Memo

Subject: AECOM Response

Dear Ofwat,

We are pleased to provide our response to the Innovation funding and competition: further consultation on design and implementation below. If you require any clarification or further details, we would be happy to provide them, either in writing, or via telephone conference.

Please include myself  in any future requests for information\tender opportunities or other requests in relation to the innovation competition.

Kind Regards



Consultation questions	Response
<p>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.)?</p>	<p>We certainly agree that it is not a one size fits all.</p> <p>Need to consider that not every innovation can be protected, so IPR is sometimes irrelevant. Instead, supply chain uses imperfect market knowledge to gain market lead though 'secret' trails. For instance, in the rail context, many suppliers see NR's product approval prices as effectively giving them a 2-3 year market lead on the competition, so formal IPR is less relevant.</p> <p>This approach to IPR coupled with other decisions/proposals in the consultation document will lead to a default of projects being comprised almost entirely of background IP and the competition will be used to roll out technology that has already been developed elsewhere. The IPR position, coupled with the roll out focus and 'in AMP' delivery the competition will not create transformational change, merely implement change developed elsewhere. This resultant focus on background IP could almost entirely eliminate any royalty generation for customers.</p>
<p>Q2: What alternative arrangements should we be considering for IPR/ royalties?</p>	<p>May want to consider export market. For innovations that can be exported, perhaps the real value in the UK is the ability for a company to trial/ roll out and have reference projects from which to sell to others. In this case the water company benefits from domestic sales and the company benefits from exports.</p> <p>Agree whole heartedly that the IPR issue should be secondary to the wider benefits. Therefore, arguably the water company should select technologies on the benefits they bring rather than the share of royalties they get.</p> <p>A more nuanced IP position is required, as discussed above new ideas that could be transformational need to be encouraged, not hindered by a blanket IP position. Ofwat should consider implementing a version of the EU innovation partnership process.</p>
<p>Q3: Do you agree with the principle that data generated through the innovation competition should be open by default?</p>	<p>This would present barriers to suppliers who have a near to market offering. They need the secrecy to gain market lead. That said, there should be a clear system for innovation coordinators to know which trials are being performed where on the whole network, even if not made public. In UK rail, when conducting reviews I was staggered at the sheer misalignment of understanding between e.g. DfT and NR on fairly basic things, such as whether certain trials of new technology were even happening.</p> <p>Appreciate the need for secrecy in terms of GDPR/ security, but typical data could be shared to attract new entrants.</p> <p>Standardisation of data is a way of the industry kicking the issue into the long grass – the data sharing is really just to give new entrants a better understanding of the market context.</p>
<p>Q4: Do you agree with our proposed approach and that we should consider alternative arrangements beyond company contributions?</p>	<p>How would they deal with an innovation project that could be valuable to all, but only have a small value for any one company? Bringing in funding from other sources could be very tricky as if it is a public funding source, the alignment of objectives and timescales to suit the different stage gates could prove a step too far.</p> <p>If they can do a revolving funding, then great – but usually public funding only goes in one direction.</p>

	<p>How will contributions in kind be considered? How do the supply chain contributions work? What if it is a startup with a capital intensive transformational idea?</p>
<p>Q5: Do you agree that a guideline minimum company contribution of 10% is appropriate in this context?</p>	<p>The text states 'minimum <u>combined</u> company contribution of 10% of individual innovation competition bids'. Therefore, if all 17 companies were to be involved in a particular innovation that had national applicability, each company would on average contribute at least 0.6%. If contributions in kind are considered, then this could work well.</p> <p>If a solution only has a regional benefit, e.g. applicable only to hard water areas, should the contribution be higher from the beneficial companies?</p> <p>The contribution requirement should be higher the closer to market ready the proposal is. For a new untested idea, where risk is highest the contribution should be lower. Where the idea is assessed to be at a higher TRL the company's contribution should be much higher.</p>
<p>Q6: Do you agree with the overarching approach we set out here?</p>	<p>Yes, the flexible approach that can adapt to actual evidence is welcomed. However, it is important to note that significant changes of direction should be avoided to reduce the risk of stakeholder losing confidence in the direction of travel.</p> <p>During the consultation webinar John Russell commented that the industry is good at piloting technologies but is very poor at implementing them. This competition will go some way to addressing this challenge, but doesn't get to the root cause – siloed companies that are unable to change and adapt at anything other than glacial speed. Does ofwat think that just by having the innovation competition (which is really a scale up funding mechanism) it will cause the required structural and cultural changes needed within the companies? An assessment of plans for roll out – and measuring the effectiveness of it should be a requirement – the performance of a companies roll out could be used to handicap or promote companies in future competitions.</p> <p>In Annex 1 - the structure with OfWat as the final decision maker - there is a missing layer of governance that can say with confidence what a successful idea looks like and can hold the delivery teams to account - OfWat doesn't have the experience to do this – as an economic regulator, and the current structure won't give this control to the organisation that coordinates the competition.</p> <p>The types of project can easily be resolved by theming the competitions and have a known schedule as early as possible so that companies can aim for the most appropriate one.</p>
<p>Q7: What are your views on introducing separate, proportionate, arrangements for small-scale projects? How might we define small-</p>	<p>This is a good idea as levels of governance need to be proportionate with project spend.</p>

<p>scale projects for the purposes of the innovation competition?</p>	
<p>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?</p>	<p>Joint funding of projects should naturally provide near market focus as the supply chain would not invest if they did not see a reasonable chance of return.</p> <p>Having roll out at the heart of the competition will not attract new ideas or entrants to the market. – It needs to be more balanced between encouraging new ideas (that could be transformational) and implementing technology/services that are commercially ready.</p>
<p>Q9: What practical arrangements should we introduce to ensure adequate ring-fencing of the innovation funding?</p>	<p>Need to consider the period of time that funds are in the innovation account and who benefits from the interest. Also need to ensure separate account with audit facility. If central team is hosted by e.g. UKWater, there is a risk of blurred finding lines. Not a show stopper, but does need to be managed. In UK rail, the FutureRailway was hosted by RSSB which resulted in very blurred funding decisions and accountabilities.</p> <p>If water companies received no funding upfront, there is a risk that they will not to engage due to internal budget not allowing them to go into negative cash flow whilst they develop projects.</p>
<p>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?</p>	<p>Need to build innovation capability and culture of water companies and ensure the capacity is in place.</p> <p>Lessons need to be learnt from Energy innovation competitions to ensure that new entrants are encouraged and supported – how do water companies build relationships outside of their known suppliers?</p>
<p>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?</p>	<p>I guess they will need to live with the reality that customer funding and returned benefits will not be even across the UK. Trying to ensure even funding/ reward will be almost impossible and go against competitive spirit. There are plenty of other instances where consumers in one part of the country subsidise services in another part of the country (e.g. Rail fares), so there is precedence.</p> <p>How will the failure of a project be assessed? Failure of the idea is going to happen otherwise this is not an innovation competition. Failure of the team needs to be penalised. If there are unused funds that it is a failure of the competition.</p>
<p>Q12: Do you agree with our proposed approach for managing interactions with the price review?</p>	<p>Broadly agree that innovation should not affect main delivery activities in this settlement period. Could benchmark with other water companies overseas to ensure future % of turnover is invested in innovation.</p> <p>The proposed approach takes no account of the fact that the stated goals are to create transformational change and to be roll out focussed. These both should if applied properly have potential impacts on outcome performance could be significant but may not manifest until the next review period. – How will this accumulated risk be accounted for?</p>

<p>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?</p>	<p>Principle 4 states: Innovation fostered through the innovation competition must provide public value for all customers in England and Wales – Does this mean that innovation such as addressing hard water issues would not be progressed, as it does not apply to all?</p> <p>The unintended consequences of IP and Roll out focus need to be considered more fully before finalising the principles. We currently expect the competition to diverge away from the principles due to the roll out focus.</p>
<p>Q14: Do you agree with our proposed focus, major strategic themes and overall approach for the competition?</p>	<p>It is not obvious how competing solutions could be progressed to a certain stage and then down selected. This is often the experience with other industry schemes, whereby several competing solutions are funding through feasibility and then down selected on the basis of evidence. Funding is then provided to a fewer number of likely successful technologies for further development/ operational trial. This would then provide the industry with a focused range of suitable solutions that would then be available for roll out. The specific choice after this could be due to factors outside the water industries control such as cost of supply which may be tied to demand from other industries. The timing of demand (e.g. due to stage in asset replacement cycle) could also affect the supply cost of different technologies. The innovation process needs to account for this and recognise that it is not a closed linear process.</p> <p>Focussing on collaboration rather than delivery will potentially limit the effectiveness of the projects delivered.</p> <p>There is no mention of the roll out focus in the design of the competition – the implications of this need to be considered in the design of the competition.</p> <p>The challenge of roll out focus, the proposed IPR and no mention of the duration it takes to get a lower TRL idea developed to a commercial product/service for wider roll out is a concern for the types of ideas that will be successful. It is probable that only lower TRL ideas can realistically be funded in year 1 (or possibly year 2) to have any chance of being deployed in the same AMP. (The amount of funding necessary increases significantly as the TRL increases).</p>
<p>Q15: What is the appropriate split of available funding between the Innovation in Water Challenge, the main competition and enabling activities?</p>	<p>Enabling activities: 5-15% - Should this decrease over the AMP? Innovation in Water Challenge: 15-25% Main Competition: 60-80%</p>
<p>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?</p>	<p>Our experience from similar rail competitions that relied on joint application with train operators (TOCs). The competitions improved over about 3-5 years as the TOC's built capability. However, the first few years saw more money available than the TOCs had time to apply for and some TOC's cleaning up the funding as they were first out the blocks – for this to work the Water Company's need to acknowledge this would be allowed to happen – otherwise they will move at the pace of the slowest.</p>

	<p>Innovation is all about experimenting and changing quickly – all three activities should be run in the pilot year. The regulator must lead by the example it expects the companies to adopt.</p>
<p>Q17: Do you agree with our proposed approach to key implementation considerations outlined here?</p>	<p>Whilst we note the costs of administering the innovation funding and competition will be assured through a transparent tender process, we would highlight the risk critical need for quality of the administration of the innovation funding and competition. As such, consideration may be given to a framework arrangement and/or delivery split between several parties to ensure in depth expertise is available across a range of disciplines (the full extent not currently known).</p> <p>With reference to Ofwat taking a role in final decision-making, we would stress the need for a clear objective assessment framework which is clearly communicated at the start of any competition. If Ofwat are to take final decisions, their rationale should be clear and communicated from the start.</p> <p>The evaluation of the program would need to be ongoing, recognising that lessons learnt about the process would need to be identified and applied rapidly (to the next competition), whilst evaluation of actual projects would be on a case by case by case basis.</p> <p>True innovation, not just roll out of existing technology, is about testing ideas and moving to the most effective solution. The implementation considerations do not allow for changing direction of ideas once the funding has commenced.</p> <p>If Ofwat is going to fund truly innovative and transformational ideas some of them will (regardless of effort applied) fail and this needs to be considered in how the process will be implemented. – When an idea is killed prior to all its awarded funding being spent – how is it returned to the pot? If it only fails once the funding is completely spent – who/how will it be assessed? How will the lessons be captured/shared with all the stakeholders?</p>