
WRC Response to Ofwat Consultation on Innovation Funding and Competition

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.)?

It is widely recognised that IPR and royalties play an important role in facilitating innovation and reducing risk for commercial enterprises in a competitive marketplace. Furthermore, innovative technological ideas require extensive technical development and testing before achieving success in the marketplace. IPR, in the form of patents or trade secrets, allows the developer to continue to invest through the “valley of death” phase before reaping rewards in the marketplace. Royalties are a mechanism of reward for those commercial enterprises that have put in the “hard yards” to get an innovation to market.

Water companies have neither the motivation nor the skillsets to earn the IPR or royalties in a competitive marketplace; rather they should use their dominant position to facilitate innovation through the supply chain. Therefore, the proposals as presented are not conducive to encouraging innovation and may act as a disincentive to commercial enterprises who wish to get involved.

An assignment of IP to the water companies solely on the basis that they manage the fund further emphasises their dominant role in the UK marketplace whereas most innovation occurs in SME’s, consultancies, contractors, academia, individuals and new ideas need to be encouraged to come forward and change the approach the sector has taken for the last 30 years.

In practice the water companies and customers are getting the benefit of the funding from implementation of the project outputs, particularly if the aspiration for transformational innovation is fulfilled.

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

In the water sector, the UK is not considered to be a powerhouse in terms of Patents and IP compared to countries globally (FWA/ Clarivate study – January 2020) with China dominating the world stage. An active IP market is essential to innovation and invention, but it must be linked to allowing for returns on investment, particularly where the IP is underpinned by a patent. However, a lot of IPR is also included in trade secrets and never patented due to the high costs of protection and potentially extremely high legal fees in the case of a breach. We believe that if the water companies are unwilling to give up all IPR rights associated with the fund, there are two further routes that could be productive:

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- An independent IPR organisation should be established to manage all IP protection for the sector and act as a catalyst for innovation uptake in the UK water industry. The remit would be to manage the IP where this is of common interest to the sector, whilst also benefitting those developing the ideas.
- Have a completely open approach to IPR with ALL data and results published quarterly on the fund website and encourage enterprises to get involved in each project through a series of innovation vouchers (up to £5k) to allow them to present their ideas into active projects.

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

Data sharing is at the heart of collaboration so there should be an open by default arrangement except where it is in conflict with IPR and could therefore inhibit future roll out.

Most importantly there should be independent data governance to ensure the appropriate data is made available from projects.

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

It is important for the water companies to show their commitment to projects to ensure that they are fully supported through to implementation and roll-out. Alternative arrangements could be applicable for some projects particularly where the project is a transformational approach involving some of the “softer innovative solutions” (not necessarily implementation of technology) requiring other stakeholders to be involved in order to be successful.

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

10% of total project costs could be appropriate but the allocation of this needs to be totally transparent. The guiding principle is that it must benefit customers in the UK to guard against the possibility of financial gearing driving decision making.

It is also important that the financial arrangements do not drive the selection process for successful projects during the competition. We would recommend a two stage process to project selection whereby firstly the technical bid is assessed and then the financial bid only if the technical bid meets stated criteria.

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

Flexibility is welcomed and the emphasis on roll out is vital to achieving any benefits, this is one of the most challenging areas as evidenced in other funding schemes. In order to accelerate roll out, strong project governance is vital. Success criteria need to be agreed by the wider industry (not just participants) and a robust scientific and engineering approach to trials is required for the wider industry to implement. This is where the enabling activities and the scope of the virtual water innovation centre need to be clearly defined and set up in advance.

Impact on the zero carbon goal of the water industry should be a key theme running through the whole of the programme. Projects which do not contribute towards this goal should not be funded.

Implementation should be embedded into the bid process and a key element of the evaluation criteria. We would recommend the use of an independent technology validation programme – we say more about this in question 17.

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?

Proportionate arrangements for small-scale projects driven from the supply chain are welcome. Factors to be considered to define small scale include size of impact of benefits, time to completion and roll-out, ease of implementation, impact on carbon reduction as well as cost of the 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?

Yes, it is vital to concentrate on roll out. The competition can only be considered a success if there is wide roll out of successful projects. Leaders and fast followers have the advantage of getting benefits early so additional rewards and incentives are not required.

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

The commercial contract arrangements need to be clearly defined. From a supplier viewpoint it will be unacceptable to have a convoluted contract with more than one entity, there needs to be one organisation that underwrites the project, ensures that the funding is allocated to the correct parties in a timely fashion in order to provide working capital to the contributors.

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?

The proposed approach is a start but there needs to be much greater clarity on how the innovators as “key players” are to be kept involved in the process and rewarded otherwise this could become a barrier particularly to SMEs. It is proposed that the projects are to be managed and delivered by water companies; however it is unlikely that they currently have the necessary skills to deliver innovation projects which need a different approach to traditional engineering projects.

There are currently many other innovation competitions held across the industry where innovations are pitched and compared. These include those managed by British Water, Future Water Association and the Institute of Water, keying in to these competitions could save a lot of time.

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?

Unspent funds should be returned to the customer but if this is a common occurrence then the competition has failed. The decisions taken on “misspent” funding need to be transparent, and the circumstances under which would happen need to be clearly defined from the beginning. The nature of innovation projects means that sometimes a change of direction is required; these changes need careful management by people and organisations with appropriate experience and expertise.

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

We generally agree that if the intention is to fund innovation that would not otherwise be carried out by the water companies then there should be little overlap with the ODIs in the current AMP. Where there was any potential interaction it would be helpful for the water companies to set out their management plans for meeting the ODIs so that the interaction is transparent.

However the water companies are traditionally risk averse so to encourage risk free adoption of innovation it may be prudent to allow consideration of changes to ODIs on a case by case basis especially where it is probable that there will be a greater overall benefit in the future.

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?

The emphasis on roll out and a minimum contribution to the projects by water companies are welcome changes; however more fundamentally, the term “transformational innovation” needs to be elaborated. Funding a few large scale technology trials will not bring the breadth of desired benefits. If the aim of the fund is to bring about transformation of the industry it needs to attract projects which prepare our industry for the future in terms of not just technology but people and processes. There needs to be a focus on driving the EDI (Equality, Diversity and Inclusion) agenda and upskilling of our workforce for the future.

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

We believe the overall aims of the competition to be laudable but some of the mechanisms required to bring about these aims need further clarification. It is unclear how the main competition will encourage the required collaboration for truly transformational innovation to occur.

The major strategic themes need to be elaborated to define what is meant by transformational innovation for these themes. The role of the supporting organisation to manage the fund is very important. This needs to have the necessary expertise and independence but not become over bureaucratic and cost too much money to set up.

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

Without more clarification regarding the main competition it is difficult to answer this question.

The enabling activities are key to the success of the programme in the first year, without the necessary skills and expertise in setting up, managing and monitoring projects and independently verifying outcomes roll out could be jeopardised and the rest of the funding could be wasted. This should be funded at the earliest opportunity.

The Innovation in Water Challenge could provide a source of quick wins in the first year of the necessary commercial arrangements can be put in place. We would suggest most of the first year funding should be allocated to this strand of the programme.

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 this will be difficult in year one seeing as we are already a quarter through. Therefore there should be an emphasis on enabling activities and the Innovation Water Challenge in the first year.

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

The outlined approach appears valid. We have already suggested that if implementation and roll out is to be at the heart of the competition then robust testing and validation of the innovation outcomes is required underpinned by sound scientific, engineering and economic principles. This needs to be acceptable by all to avoid the “not tested here” syndrome prevalent in the industry today.

Consideration should be given to the use of an independent verification scheme such as the [WRc Approved](#) scheme or the [EU Environmental Technology Verification](#) . This would accelerate take up by the water companies and provide the supply chain with access and verification to aid implementation.