

Ofwat
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innovationconsultation@ofwat.gov.uk

22nd June, 2020

Dear Sir,

Re: MTC Response to Ofwat Innovation funding and competition: further consultation on design and implementation focusing on questions 1, 2, 3, 6, 7, 8, 13 and 16.

Thank you for the opportunity to respond to your consultation on the proposed Ofwat innovation model for future.

The Manufacturing Technology Centre (MTC) is a non-profit distributing company limited by guarantee, part of the High Value Manufacturing Catapult, and was established at Ansty Park, Coventry in 2010 with the objective of bridging the gap between academia and industry. In partnership with industry, academia and other institutions we develop and prove innovative manufacturing processes and technologies in an agile, low-risk environment through Technology Readiness Levels (TRL) 3 to 7.

Through the High Value Manufacturing Catapult model and specifically for manufacturing, we have seen significant growth and demand for our services and offerings since 2010 which has been independently verified through an EY report in November 2017¹ and therefore we believe we can provide some valuable input to the innovation related questions posed as part of your consultation, based on our experience.

This is further evidenced through our experience of running the Construction Innovation Hub (CIH) – a centre of excellence bringing together world-class expertise from the Manufacturing Technology Centre (MTC), BRE (Building Research Establishment) and the Centre for Digital Built Britain (CDBB) to transform, technologically and culturally, the UK construction industry.

Below you will find our responses to those questions where we believe can add most value together with a summary concluding statement.

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

We agree with the fundamental principle of acknowledging background and foreground IPR. We believe that the IPR arrangements should facilitate the achievement of a programme's overall goals.

The arrangements should:

¹ UK SBS PS17086 Catapult Network Review

- be flexible enough to be tailored to the different circumstances of partners and business users, large and small,
- manage the development, protection and exploitation of new technology for the benefit of industry and encourage a knowledge of existing third party IP rights, and
- avoid creating burdensome costs for small companies and other customers.

We support the principle that foreground IPR created within projects developed through 'public funds' should benefit the wider sector. Therefore there should be mechanisms, for example through licence agreements, for the sector to encourage national rollout and/or there should be appropriate recovery and knowledge sharing mechanisms through regulatory models as proposed.

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

We would caution against complexity in the application of a royalties based approach. Widespread adoption and pace can be hampered considerably by the use of a royalties model. We would encourage customer funders to assess whether their interests are best served by slow adoption IP licensing revenue or through rapid adoption of IP in their supply chains to improve profitability.

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

We support that data and information generated through the innovation competition should be open by default. However, we believe that to deliver the cultural change shift that Ofwat are seeking to achieve through this innovation consultation a model needs to be adopted which focuses on knowledge transfer within the sector and which goes much further than just 'open data and information'.

We believe that the impact of sharing of information is substantially greater if learning and sharing is collaborative and through a mechanism which focuses on collective problem-solving, involving multiple experts within the existing and wider supply chain, through either a single centre or group of centres of excellence. Such an approach helps facilitate a cultural change shift, since multiple organisations are brought into the innovation journey, because they are engaged through the innovation life-cycle, from problem scoping, to solution design to delivery, including implementation. Involving partners from adjacent sectors also brings fresh ideas and speeds up cross-sector learning and technology adoption.

The MTC and partners have experience of leading this through the Construction Innovation Hub (CIH) which is acting as the catalyst for change within the Construction Sector, supported by government. The CIH is driving collaboration to develop, commercialise and promote digital and manufacturing technologies for the construction sector. This will help build smarter, greener and more efficient buildings, much faster and cheaper than today, which is a very good parallel to many of the current challenge themes outlined within both your consultation document and the early focus areas of the embryonic Water Innovation Strategy. The model works with single or multiple centres and in the case of multiple centres then our suggestion is that these could be focused around 'themes'. A good example of such a theme would be digital, where we could foresee a centre of excellence driving a digital transformation across the water sector, including delivering cross sector learning from parallel initiatives.

Specifically on open infrastructure data, the MTC would encourage Ofwat to consider and align any proposals in this area to a national framework and standard to enable future sharing and cross compatibility. Again this is a key driver within the CIH with one of the partners driving standardisation across the construction 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?

We support the overarching approach as proposed, especially the desire to keep some flexibility. Our experience is that requirements and priorities evolve over time, and therefore the programme should allow for a degree of change in strategic direction and allow time for collective agreement and mobilisation behind priorities. That said, linking the innovation needs to the wider Water Innovation Strategy work must be a priority activity and would help garner agreement across the water networks and the supply chain, providing a much needed focus.

With respect to smaller scale projects, we suggest that Ofwat should learn from the experience of the gas and electricity Network Innovation Allowance (NIA) fund. Our understanding is that Ofgem are encouraging and having to drive cross-fertilisation of learning and implementation across the various companies in the sector. There is a risk in any implementation of a model for multiple small scale projects that funding becomes too diluted and therefore the impact and opportunity of major transformational innovation is lost. Our experience is that this can be mitigated through having a centralised hub approach and ensuring alignment and funding to national, key strategic themes.

We support the principle that 'roll-out' should be at the heart of any proposed model. Our belief is that the most successful implementations will be where stakeholders are engaged within the end-to-end change project, as opposed to being handed a project to implement. In addition, we believe it is important that Ofwat consider supply chain readiness within the development cycle as this is a critical component of any delivery model. The manufacturing readiness level (MRL) of the solution development is arguably as important as the technology readiness level (TRL) since good ideas and solutions need to be capable of being made to be ready to be rolled out quickly and at scale. This overall activity for MRL can be managed through a collaborative approach and through the model of a centre of excellence involving the supply chain.

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?

We support the proposed amendments to the principles and would highlight the importance of principles one and two (people, process and technology and driving transformational innovation) to be the primary focus to support the desired cultural change.

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 refer to our answer included as part of questions 6-8. We believe that there is a danger of diluting funding across too many themes and projects and over multiple years should the same model be pursued post 2021 and therefore there is a risk of the transformational change sought becoming diluted. Should a direction of travel have been decided upon for year one, we would encourage Ofwat to consider an overall model review for the remaining years of the formula period to consider the alternative models and approaches suggested.

Summary

We welcome the principle and ambition to secure a culture of innovation within water network utility businesses at the heart of the proposals. We would encourage Ofwat to consider elements of alternative proven models to drive more Transformational change across the sector to help facilitate the desired end state, focused around a principle of a centre of excellence driving technological and cultural change. MTC has experience in this model and would welcome the opportunity to discuss this directly with Ofwat and to discuss how some proposals and partnerships could deliver improvements for the water industry.

Yours faithfully,

