Water Breakthrough Challenge 2:   
Catalyst entry form questions

Please note this file is for drafting purposes only. Please ensure you enter all the final details on the online form available on [Submittable](https://challenges.submittable.com/submit). The online form will close at 12 noon (GMT) on 8 December 2021.

Welcome to the entry form for the Catalyst Stream of the Water Breakthrough Challenge 2. Please refer to the [Entrant Handbook](https://waterinnovation.challenges.org/breakthrough2/about/catalyst/#materials) when creating your entry, which details the assessment criteria and assessors' guidance for each question.

There are three types of questions in this entry form:

* Unassessed questions - these questions are not scored but will be used to manage your entry, determine eligibility, and create announcement materials if your entry is successful.
* Assessed general questions – these questions are not be scored but will be used to aid the understanding of our judges and assessors when scoring your entry.
* Assessed criteria questions – these questions are scored against the assessment criteria.

If you have any questions relating to the form or the Challenge please feel free to email <waterinnovation@nesta.org.uk>. Please note that we will aim to get back to you in 1-2 working days; we recommend emailing with questions as soon as you can and no later than 7 December 2021.

# Eligibility Criteria (y/n answers)

Is the lead entrant a water company (including NAVs) in England and Wales? Yes/No

Are all entry partners abiding to the [terms and conditions](http://waterinnovation.challenges.org/breakthrough2/terms-conditions/) of Breakthrough 2? Yes/No

Do the entry partners commit to making a minimum 10% total financial contribution to this entry if it is awarded funding? Yes/No

Is the amount of funding requested between £100,000 and  £1,000,000? Yes/No

# Unassessed Questions

## Entry Details

### Which organisation is leading this entry?

Please select the name of the lead entrant organisation. The lead entrant must be one of the licensed regional water only and water and wastewater companies or new entrant water and wastewater companies (NAVs) in England and Wales.

Draft your answer

### Please provide the mailing address of the lead organisation.

This may be used for correspondence if the entry is successful.

Draft your answer

### Name (s) of Partner Organisation (s)

Please provide a list of the legal name(s) of all partner organisations involved in this entry excluding the lead entrant. Please also provide an email address for the lead contact at each partner organisation.

Draft your answer

## Main Contact Details

You must designate one person from the lead entrant as the main contact. This person will be the primary point of contact with the Breakthrough 2 delivery partners. This is the person who we will contact for all matters relating to your entry. Please ensure that the information provided below relates to the same person.

### Name of main contact:

### Main contact job title:

### Main contact’s work email address(es):

### Main contact’s work telephone number:

## Funding

### What is the amount you are requesting from the Fund?

Please provide the value of funds requested from Breakthrough 2 [in £GBP] in nominal (today’s) prices, excluding the 10% compulsory financial contribution. The amount of funding requested must be between £100,000 and up to £1,000,000.

Draft your answer

### What is the value of your 10% mandatory financial contribution?

Please provide the value of the 10% mandatory financial contribution entry partners have committed to contribute to the entry if it is successful in being awarded funding [in £GBP] in nominal (today’s) prices. The mandatory 10% contribution should be no less than 10% of the total financial cost of the entry. Please exclude any additional financial or in-kind contributions (these should be covered in Civ. below).

Draft your answer

### What is the value of any in-kind or financial contributions excluding the 10% mandatory financial contribution relevant to the project?

Please provide the value of any in-kind or financial contributions from any source beyond the mandatory 10% financial contribution (in £GBP) in nominal (today’s) prices.

Draft your answer

### What is the total cost of your project?

Please provide the total cost of the project (in £GBP) including workstreams and funds not covered by the Breakthrough 2 entry and any financial and in-kind contributions which are financially quantifiable. Please provide this in nominal (today’s) prices (including inflation assumptions). These figures should be inclusive of applicable taxes which are not recoverable, reflecting the true costs of the entry. Where taxes are fully recoverable, such as VAT, costs should be shown net of the recoverable amount. Taxes that are not recoverable should be included, for example, customs duties payable on goods imported into the UK.

Draft your answer

## Intellectual Property Rights

### Which IPR option are you choosing? *(Single option)*

1a. Default IPR

1b. Alternative IPR

2. Background IPR Trial

### Default IPR *(appears only if answer to Di. is* ***Default****)*

Please explain how you will comply with the default position at section 4 of the [terms and conditions](http://waterinnovation.challenges.org/breakthrough2/terms-conditions/), including detail of:

* whether the funded entry (i.e. that part funded by the Fund) is part of a wider project;
* the extent to which Foreground IPR will be created; and
* what background IPR and what Foreground IPR will be available. In answering this part, please include details of Foreground IPR, Background IPR that is necessary to use the Foreground IPR and (if appropriate) any wider background IPR that is related to the delivery of the project as a whole (i.e. not just the funded entry).

### Alternative IPR *(Appears only if answer to Di. is* ***Alternative****)*

Please set out your alternative IPR proposals and how they meet the following conditions:

1. The entry will not result in restricted benefits to customers of water companies in England and Wales;

2. The alternative arrangements will not result in additional costs to customers.

In setting out how your proposals meet the criteria, answers must include the following:

* Whether the funded entry (i.e. that part funded by the Fund) is part of a wider project;
* Details of Foreground IPR to be generated by the funded entry, details of Background IPR that is necessary to use the Foreground IPR for the funded entry and details of wider background IPR relating to the delivery of the project as a whole (i.e. not just the funded entry);
* What IPR will be available for the funded entry under the proposed alternative IPR provisions, and the customer benefits of that availability alone.
* If the wider project Background IPR will be available, what would the terms be?

Please include an assessment, including where appropriate a cost benefit analysis, as to how these terms are proportionate given the wider benefits to customers. Where your proposal does not align with the default position on IPR, Ofwat has discretion to consider alternative IPR arrangements.

Draft your answer

### Background IPR Trial *(Only appears if the answer to Di. is* ***Trial****)*

For the purpose of the Trial option, the terms and conditions differentiate between 'General Background IPR' and 'Specific Background IPR'. Specific Background IPR is Background IPR which has been specifically identified in this application, and is such Background IPR that may be licenced on terms including a royalty and/or other appropriate forms of remuneration. General Background IPR is any and all Background IPR that is not Specific Background IPR. Ofwat has discretion to consider whether Background IPR may be designated as Specific Background IPR.

Please set out how your proposals will not result in restricted benefits to customers of water companies, and ultimately there will not be additional costs to customers.

In setting out your proposals your response should include details of:

* Whether the funded entry (i.e. that part funded by the Fund) is part of a wider project;
* Foreground IPR to be generated by the funded entry;
* Background IPR that is necessary to use the Foreground IPR for the funded entry, clearly distinguishing between General Background IPR and Specific Background IPR; and
* any other background IPR relating to the delivery of the project as a whole (i.e. not the funded entry)

Where you are seeking to designate Background IPR as Specific Background IPR, you must include as much detail as possible in your application relating to potential levels of royalties and/or other appropriate forms of remuneration that you or your partners intend to impose on the Water Companies (where these are known or can be proposed at this stage of the project), or the mechanism and principles you or your partners may use to calculate these in future. In all instances you must set out how and why you consider that the proposals or the approaches outlined are fair, reasonable and non-discriminatory. We understand that it may not be possible to provide this information for projects that are at an early stage of development, where this is the case you should clearly state what information you can and cannot provide at the point of submitting your application.

Where possible, you should provide information in your response that demonstrates how the proposed royalties, remuneration and/or mechanism(s) are:

* reasonable in light of market standard royalties or other remuneration;
* no less favourable than the terms that you may offer to third parties;
* in all cases, proportional to the funding contributed by Ofwat to the development of the relevant Foreground IPR; and
* generally, in line with the principle that the Foreground IPR (and therefore the Background IPR required to use the Foreground IPR) must be used for the benefit of the customers of all water companies and present value for money for those customers.

In order to assess whether the proposed terms are **fair, reasonable and non-discriminatory** we expect you to provide information in your entry that demonstrates how the proposed royalties, remuneration and/or principles are:

* reasonable in light of market standard royalties or other remuneration;
* no less favourable than the terms that you may offer to third parties;
* in all cases, proportional to the funding contributed by Ofwat to the development of the relevant Foreground IPR; and
* generally, in line with the principle that the Foreground IPR (and therefore the Background IPR required to use the Foreground IPR) must be used for the benefit of the customers of all water companies and present value for money for those customers.

Draft your answer

## Confidentiality

### Confidentiality of your entry

Please list the questions numbers in this entry form where you consider your responses contain confidential information. We may ask for further details regarding your assessment of confidentiality at a later date. Where possible, we ask that you avoid including confidential information in your response to Questions Ai, Aiii, 0.1 and 0.2. If you do include confidential information in response to these questions, please clearly identify it.

Draft your answer

### Details of confidentiality of your entry

Please briefly explain why you consider your answers to be confidential in line with your response to Ei.

Draft your answer

## Monitoring & Evaluation Questions

### What is the duration (in months) of your project?

Draft your answer

### Anticipated start date:

Please state the date you anticipate your project beginning. We expect entries to the Breakthrough 2 that are awarded funding to start within 6 months of being notified of the award, but we recognise that some entries may require a longer mobilisation period.

### Anticipated end date:

Assuming you start on your anticipated start date, please state the date you anticipate your project being complete.

### Entry stage at start of project:

Dropdown project stages as set out in 8.1 Appendix 1 Project Stages in the Handbook.

Please select the most relevant project stage that your entry will be at when it starts using Breakthrough 2 funding.

### Entry stage anticipated at project completion:

Dropdown project stages as set out in 8.1 Appendix 1 Project Stages in the Handbook.

Please select the most relevant project stage that your entry be at when it is complete.

### Are you resubmitting this entry following a previous submission to an Ofwat innovation competition round? *(Single option)*

Yes/No

### Have the entry partners worked together with the lead entrant before? *(Single Option)*

Yes, it’s an existing partnership

Yes, but we’re partnering in a different capacity for the entry

No, it’s a new partnership

### Please explain your answer to question Fvii above.

Draft your answer

# Assessed Questions

## General Questions

### 0.1 Entry Title

Please include a short name to reference your entry.

### 0.2 Entry description

Please provide a concise summary of your entry in jargon free, plain English. This may be used in public facing communications if the entry is successful. Limit: 250 words

Draft your answer

## Positive impact for water customers, society and the environment

Under this assessment category, we will be looking to understand the benefits your entry seeks to deliver for customers, society, and the environment.

Strong entries will be seeking to address a well evidenced, important need or opportunity in the water sector in England and Wales for water customers, society and/or the environment that aligns with one or more of Ofwat’s five strategic innovation themes.

### 1.1.1 What is the problem that the proposed entry is seeking to address for the water sector?

Please provide a short narrative summary of the customer, society and/or environmental need this entry aims to address and why it is significant to the water sector. Limit: 250 words

Draft your answer

### 1.1.2 What, if anything, has already been done to understand and address this problem, either by the entry partners or others?

Please provide a summary of any work to date undertaken to address this problem by you or others, detailing the key aspects of the problem that have not yet been addressed. Limit: 250 words

Draft your answer

### 1.2.1 How will this entry directly deliver better short and long-term outcomes against one (or more) of Ofwat’s 5 strategic innovation themes?

With particular reference to water and wastewater customers in England and Wales, please provide a short narrative to set out how the outcomes, benefits and impacts of the entry proposes to directly impact and align with the Ofwat themes. We are interested in the strength of alignment rather than the number of Ofwat themes that are addressed. Limit: 250 words

Draft your answer

### 1.2.2 Select which theme(s) your entry is impacting: *(Dropdown)*

Please select the Ofwat theme(s) which are directly impacted through this entry.

Theme most impacted (List of themes 1-5 + Not Applicable)

Theme 2nd most impacted (List of themes 1-5 + Not Applicable)

Theme 3rd most impacted etc.

### 1.3.1 What are the entry’s intended outcomes?

Please provide a bullet point list of the intended outcomes (what the entry hopes to achieve/accomplish by project completion), with particular reference to positive outcomes for water and wastewater customers in England and Wales.

For example, an outcome may be that, by entry completion, a new approach will be accepted and brought into operations by all entry partner organisations using a new acceptance process developed within the entry. Limit: 300 words

Draft your answer

### 1.3.2 Provide an explanation of how this initiative will achieve the entry’s intended outcomes.

Please provide an explanation of how this entry will achieve the outcomes set out above. Your description should include supporting activities, assumptions, contextual factors, and external influences. Limit: 300 words

Draft your answer

### 1.3.3 What longer-term impacts and benefits will the entry provide for the water sector in England and Wales, once the project has been completed?

Please provide a narrative detailing the entry’s wider benefits, both direct and indirect. This should include how it advances innovation in the water sector in England and Wales and why this should be invested in the water sector in England and Wales. Please quantify benefits where possible and provide a description of the approach used. Where possible set out any potential cost efficiencies, if any, that you expect this project to achieve that would benefit water customers and when you anticipate these to materialise. Limit: 200 words

Draft your answer

### 1.4.1 What are the most significant external risks of your initiative and how have they been considered and addressed in the development of this entry?

Please provide a short high-level narrative which sets out the wider risks and uncertainties associated with the entry, as opposed to direct entry delivery risks.

We are looking for clarity on what is known and what is unknown/uncertain about achieving your outcomes; a clear understanding of key external risks; and the identification of opportunities of delivering this entry.

Examples of external risks may include, for example, the risk that the solution is not taken up by the sector, long term viability, changes in longer-term regulatory policy, failure to get public acceptance, risk of the solution failing to meet long-term outcomes or issues around transition to business-as-usual operations. This should include the nature of any interaction with outcome delivery incentives (ODI)s. Limit: 500 words

Draft your answer

### 1.4.2 How do the benefits of this entry justify acceptance of the external risks?

Please provide a summary of why this entry is worth funding which sets out the benefits (quantified where possible) and balance against the potential risks (quantified where possible). We recognise that to be innovative, entries may need to take on risk, therefore we are looking for evidence that these risks are balanced by significant benefits. Limit: 300 words

Draft your answer

## Innovation enablers and innovative solutions

Under this assessment category, we will be looking to understand what is novel about the proposed approach and solution, and how it could deliver a positive sector-wide innovation legacy.

Strong entries will demonstrate how the proposed entry goes beyond the entrant’s business-as-usual approach to innovation and how it may draw inspiration and/or talent from other sectors. This is both in terms of what the entrant proposes to deliver (innovative solutions) and how they propose to deliver it (innovation enablers). Innovation enablers are the innovative approaches the entry is proposing, which may include how entrants are working internally and externally with collaborators within and outside of the water sector for the benefit of water customers in England and Wales. Entries could include testing new ideas; adapting ideas or practices that have established themselves in other sectors; or adopting proven approaches that haven’t been tried at scale.

### 2.1.1 What solutions, technologies, methodologies, and/or insights are you intending to use?

Please provide a high-level summary of the solutions, technologies, methodologies, and insights proposed within this entry. Limit: 250 words

Draft your answer

### 2.1.2 What is innovative about your entry? How are the solutions, technologies, methodologies, and/or insights better than what has been developed and/or deployed in the past? Why would it not reasonably be expected to be funded as part of business as usual?

Please set out how innovative these solutions, technologies, methodologies, and insights are, including how proven they are. Please also provide a summary of how they are an improvement on others that have been developed and/or deployed previously. Please explain why this initiative wouldn't/couldn't be undertaken as part of a water company's business as usual. Limit: 350 words

Draft your answer

### 2.2.1 What approaches, ways of working and other enablers of innovation are you intending to use?

Please provide a high-level summary of the approaches, ways of working and other enablers which are proposed for this entry. For more detail on innovation enablers please refer to section 3.1 of the Entrant Handbook. Limit: 200 words

Draft your answer

### 2.2.2 What is innovative about your approach? How are the approaches and ways of working better than what has been developed and/or deployed in the past? Why isn't this approach developed as part of business-as-usual practice?

Please set out how innovative you consider your entry’s approach is, including how much research, trialling or similar has been undertaken on it so far. Please provide a summary of how this approach is an improvement on others that have been developed and/or deployed previously in the water sector. Please explain why the entry's approach wouldn't/couldn't be developed as part of a water company's business as usual. Limit: 350 words

Draft your answer

### 2.3.1 Following the successful delivery of this entry, how could it be implemented at scale across the water sector in England and Wales and what steps will you take in your entry to enable this? What challenges and/or barriers to further implementation have you identified?

Please provide a summary of how the entry can provide benefits, address water sector wide needs, and/or be used to improve operations across numerous geographies, businesses, and scenarios. Please include a summary of potential challenges or barriers to applying or implementing the outcomes of the entry at scale. Limit: 200 words

Draft your answer

## Capacity, capability and commitment to deliver

Under this assessment category, we will be looking for a clear narrative demonstrating strong evidence that the proposed entry is feasible and that appropriate resources and governance will be in place for its delivery.

### 3.1.1 Who are the senior sponsors and leaders involved in the entry, from the lead water company and partner organisations, and how are they engaged and invested in it?

Please provide a broad narrative around the engagement and investment of senior staff. In doing so, please reflect executive commitment to continuing the entry if entry personnel were to change, as well as how senior leadership envisions the entry to impact and benefit their organisations’ ambitions beyond technical improvements, for example through internal cultural change. Limit: 250 words

Draft your answer

### 3.1.2 Are any additional contributions, above the mandatory 10% contribution, committed to the entry from entry partners (including financial and non-financial)?

Please provide an overview of the contributions each partner will be committing to the entry beyond the mandatory 10% financial contribution. Non-financial contributions could include access to existing data, use of facilities, wider resources etc. Please reflect any contributions that can be financially quantified in Tab B of the Entry Template in addition to this narrative. Limit: 200 words

Draft your answer

### 3.2.1 Please provide a description of the entry delivery team. Include team structure, roles, responsibilities, skills and experience.

Please provide a short description of the key team members involved in the entry, including from partner organisations, as well as their relevant skills and experience. Please include a short description of the roles and responsibilities assigned to each of the entry partners and how this will support the success of this entry. Please also indicate which partner organisation the team member belongs to. Where roles will be filled post-award, please describe the pre-requisite skills to fulfil the role and when the role is planned to be filled. Please upload an organogram detailing the structure of the entry delivery team (JPEG, PNG or PDF). Limit: 500 words

Draft your answer

### 3.3.1 Please set out the major milestones and activities for the entry.

Please detail the phases of delivery of your entry, with details of the activities that will happen within each phase. Set out proposed milestones at the end of each phase and how you will determine if the entry has successfully met these milestones. These milestones should be proportional to the scale and risk of your entry. Please link these to the major entry delivery stages and phases for your entry. Limit: 250 words

Draft your answer

### 3.3.2 What project controls will be implemented and what is the monitoring plan for the delivery of the entry and its outcomes?

Please provide a narrative describing what project controls will be implemented and how, including any steering groups and stage gates processes in place for the project. Please also set out the proposal for monitoring entry delivery progress, outputs, and outcomes. Limit: 350 words

Draft your answer

### 3.4.1 What is the breakdown of the entry costs, including the assumptions made?

Please complete Tabs A, B and C of the Entry Template.

Download the Entry Template [here](http://waterinnovation.challenges.org/wp-content/uploads/sites/72/2021/10/Catalyst-Stream-Template.xlsx).

### 3.4.2 Other than that provided by any of the entry partners, what other sources of funding or in-kind contributions will be needed to support this entry?

If applicable, please set out any additional financial or non-financial resources required to complete the entry (outside the 10% contribution, the funding from the Ofwat Innovation Fund and additional contributions provided by the partners). Please also explain if the funding has been confirmed or when would it be confirmed. Limit: 250 words

Draft your answer

### 3.5.1 What are the risks and opportunities that have been identified for the entry and how will they be managed or mitigated?

Please complete the risk register template on Tab D of the Entry Template and outline up to 15 main risks for your entry. This may include any dependencies on partnership arrangements and procurement activities for example. Limit: 200 words

Please upload your completed Entry Template.

Draft your answer