

# Water Discovery Challenge Launch Webinar Transcript

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## Key:

CP = Caecilie Hougaard Pedersen

MH = Marc Hannis

CW = Caroline Wadsworth

SE = Sophie England

RP = Richard Powell

CP: Okay, good afternoon, everybody. Welcome. We are thrilled to finally be able to share with all of you, all 400+ of you that are joining very quickly, all of the information about the Water Discovery Challenge which is now open for entries. Do feel free to introduce yourself, as you're already doing, in the chat, where you're joining from, your organisation, so that we can all get to know each other a lot quicker. Also, a big welcome and a thank you to our speakers. Thank you for being here today and for talking and sharing, and I will let you all introduce yourselves very quickly, so Marc, starting with you.

MH: Yes, hi, everybody. My name is Marc Hannis and I work for Ofwat, and I am the Ofwat Lead for the Innovation Fund, and I'll say a little bit more about that in a moment.

CP: Great, thank you very much. I am Caecilie. I'm here from Challenge Works, and we are part of the Delivery Team delivering all of the challenges on behalf of the Ofwat Innovation Fund, and I will hand over to you, Caroline.

CW: Hi, everyone. Great to have you all here. I'm Caroline Wadsworth. I'm Head of Strategic Partnerships at Isle Utilities, and a core member of the Delivery Team alongside Caecilie. I'll hand over to Sophie.

SE: Hi, everyone. Nice to meet you. I'm Sophie. I'm from Arup, and I'm the Manager for Arup's input into the delivery of this fund. And I'll pass over to Richard.

RP: Yes, thank you very much. Good afternoon, everybody. I'm Rich Powell of Severn Trent, where I am Innovation and Relationship Lead, and I'm representing the water companies within England and Wales today. Nice to meet you all.

CP: Great. Thank you very much, everybody, and you will hear a lot more from our speakers later on in the webinar. So just before we get started, there's just a little bit of housekeeping, so if you have any issues during the webinar, feel free to use the chat. Our team is already ready to help you and they'll be sharing relevant materials and links throughout the presentation as well. At the end of the webinar, we will have plenty of time for our live Q&A. We will be using the platform, Slido, for the Q&A. The platform is live already, and you can use the QR code that you can see on the screen or the link that is being shared in the chat to access the Q&A and add any questions that you might have. You can add questions during the presentation or during the Q&A. The link will remain open. We will address them on a first come first basis, and we do hope to get through all of them but there are 400+ attendees, so we might not be able to address all of them, so please do feel free to email us directly if you have any

questions at the end of the webinar that are still unanswered. If your question is for a particular speaker, feel free to add that when you ask your question, and otherwise we will open the question up for the full panel.

I think, slide. Can we change the slide? Great. So today we are going to do a quick sprint through the Innovation Fund and the Water Discovery Challenge, so we will cover a quick introduction into the Innovation Fund and its mission. We'll introduce the Discovery Challenge, the aims, and also show the innovative journey throughout. We'll cover what we're looking for, what you can win if you are successful, and then we will go over all the practical steps on how to enter and what support is available, and we will finish with plenty of time for our live Q&A. So without taking up more of your time, I will hand over to Marc who is going to introduce us to the Innovation Fund.

MH: Right, thanks, Caecilie. Okay, yes, and just absolutely delighted with the numbers who've signed up for the webinar. I can see we've got over 300 on the call already, so thanks ever so much for sparing the time today. So yes, we thought it might be useful to provide a bit of background about the fund, and about our competitions before we get into the detail of the Water Discovery Challenge. So next slide, please. For those that don't know much about Ofwat, we are the economic regulator for the water sector, which means that we set price controls for the monopoly water companies that're operating in England and Wales. And in 2019, as part of that price control process, we announced the Ofwat Innovation Fund, and this was about supporting the sector's efforts to address the big challenges we face around climate change, population growth, water scarcity, extreme weather, all of that stuff that we're very well versed in at the moment. And we recognised that innovation was going to be absolutely critical to making fast progress in those areas, and that we needed to do something as a regulator to really stimulate more innovation activity in the sector, to put a rocket under it, if you like, and to accelerate the development of those key solutions for the sector.

So the fund was born and we put £200 million on the table, and to ensure the very best ideas were funded, we felt that running the fund on a competition basis would provide us with the best results. And as such, our first competition opened in early 2020 and we've been running them ever since under the moniker of the Water Breakthrough Challenge, and those competitions were designed to put water companies front and centre. And if you wanted to get involved, you had to partner with a water company. Every entry needed to be funded by a water company, and over the past couple of years this has been really, really successful. We've funded over 40 projects, just over £60 million has been spent, and we are now really beginning to see the first fruits of these projects, and we're currently in the middle of our latest round of competitions, so in the next three or four months or so, we hope to spend another £40 million. Next slide, please. Now, we expect to continue running those sorts of competitions, but we recognise, in delivering those competitions, that we weren't covering all bases. Our historic competition design strongly supported more mature innovations in those latter TRL stages.

It required a 10% monetary financial contribution, and in the early days, it has some quite tough IP arrangements, and as mentioned, water companies had quite a lot of control in determining which innovations would come forward. So as I say, this has worked really well, and there were reasons for the decisions we made, but we felt there was a gap that we weren't catering for quite as much, and that's why we have

launched that new competition, the Water Discovery Challenge. We want to identify and support those earlier stage innovations that have the potential to be transformational for the sector. We know there are tons of potential solutions out there, solutions that might be in development directly for the water sector already, solutions that serve other sectors at the moment that have the potential to be applied to water, solutions from around the world that might be looking to gain a foothold in the UK, and so on, and so on. There's tons of stuff out there, and that is why we've set up Discovery. It is directly for innovators. It is about bringing new ideas into the water sector, predominantly. And from the Ofwat side, it's also about providing financial assistance to do this, alongside also providing more pastoral, non-financial support.

And the real cherry on top of all of this is the direct access to water companies to tap into their experience and their expertise along that development journey, and a massive thanks to the water companies for their cooperation and support so far. So the competition and supporting activities we've designed we hope provide perhaps the best opportunity for a host of new and exciting solutions to break into the water sector and really prosper. Now, before I hand back to Caecilie, I wanted to mention one other thing which may be of use, and that is Streamline, which is our regulatory advice service. Now, we've set this up with colleagues at the Environment Agency and the Drinking Water Inspectorate, and it is particularly designed to support innovation in the water sector. So if you have any questions about the regulatory landscape across the sector, and how your innovation may fit into that, please do drop us a question and we can help out. And you can easily find us by Googling Ofwat Streamline. So over the next few minutes, you'll hear much, much more about the detail of the new competition, but in closing my little bit, I'd like to reiterate the warmest of welcomes from Ofwat, really, and we really encourage you, if you feel this is the right route for you after you've heard all that you need to hear today, to put forward your entries and get involved. Caecilie?

CP: Thank you very much, Marc. So yes, the Water Discovery Challenge is a £4 million competition looking for bold and ingenious innovations that can help solve some of the biggest challenges facing the water sector today, and also in the future. As you can see on the screen at the moment, the challenge very much aims to accelerate the discovery, the development and the adoption of promising innovations by the water sector, and it aims to achieve this by directly supporting organisations with innovative ideas and solutions, and facilitating their engagement with water companies, particularly through our non-financial support package and our sector led mentoring programme which is going to provide access to key stakeholders, and insights and knowledge directly from the sector to our finalists and winners. Slide? So as you've heard, since the fund's launch, entries to competitions have had to align with one or more of Ofwat's innovation themes, which are very much intended to highlight all the key areas where innovating thinking is needed within the water sector.

And for Discovery, we are looking for innovations that address these big challenges, and we aim to fund a wide range of entries that will showcase a diverse mix of innovative ways of working, and solutions, and just to reiterate that all types of innovations are very welcome in this challenge. We do recognise that the innovation areas are very broad, and that providing additional detail on these areas would be very welcome, particularly by organisations that might sit outside the water sector. So with that, Ofwat and water companies have worked very closely together to provide some additional guidance on areas where innovation might be particularly welcome through

the Water Discovery Challenge, and you can find all of that guidance and information in the Innovator handbook. And if you want to have a look, the link is being shared in our chat, but you can also find all of the information on the website and download the Innovator guide through there. Slide? And now, some of the key information that we know everyone who is here today is waiting to find out about. So the entry period for the Water Discovery Challenge opened yesterday on the 25<sup>th</sup> January. We are going to close again on the 5<sup>th</sup> April at 12 o' clock noon.

The selection of the finalists will take place between April and June 2023, and you'll hear a lot more about the selection process a little bit later on in this webinar. We will have up to 20 finalists, who will be selected, and they'll be announced at the end of June. And these will then enter what we call the finalist stage, which runs from July to November. They'll be awarded up to £50,000 along with a five month package of support which will include support to develop their idea, including a personal mentor, and support to produce their development plan, which they are going to need as a submission to enter the next stages of the challenge. Finalists will submit their development plan in November, which is an expansion and update on their original entry into the challenge. The development plans are then reviewed and the winner selection takes place between December, and January 2024. And based on the progress of the projects and the development plan submissions, we will have up to ten winners which will be selected and announced in February 2024, and these ten winners will then enter the winners' stage, which runs from February to August.

They'll be awarded up to £450,000 and they'll continue to work for an additional seven plus months, receiving a package of support including continued mentoring and support to develop their solution and test it within the water sector. Slide? So with that, we should hear a little bit more about what the challenge is looking for, what you can win if you are successful, so I will welcome back Sophie first, and then she will be followed by Caroline and Richard, so Sophie, I will hand over to you.

SE: Great, thank you. So I guess what I'm going to talk through today, if you could go on to the next slide, please, is what we're looking for through this fund. So in answer, we're looking for innovation of any kind, bringing in knowledge and innovation from any sector, any type of organisation, and from anywhere in the world. So you can bring innovation from the UK or other areas of the globe, but what we're looking for in particular is innovation which has the potential to have a positive impact for water customers, society and the environment, as well as aligning with those four innovation themes that Caecilie talked you through a couple of minutes ago. So the innovation could be anything from technology or digital, or around processes or people, and could include ideas from concept proofing, testing, early feasibility studies, development of verification in the water sector. So therefore, we have a specific focus on technologies of readiness levels three to six, but please note that while the ideas can be from anywhere in the world, to be eligible to enter, organisations must be a UK incorporated entity and hold a UK business bank account upon entry, and not be a regional water or wastewater company in England or Wales. Next slide, please. Great, thank you.

So as I mentioned, the aim is to bring in innovation from any sector from anywhere in the world, so we're looking for those innovations that address the big challenges facing the water sector. So we'll aim to fund a range of entries that will showcase a diverse mix of those innovative ways of working on some solutions. So basically we

want to draw on knowledge and ingenuity from lots of other sectors, to help transform the water system and help meet and overcome some of the challenges that we face. So taking the energy sector, for example, the energy sector and the water sector have a number of similar challenges. I guess both sectors have linear infrastructure which can be vulnerable to changes in weather or changes in demand, as well as answering to regulators and customers, and both are looking to create a modern and reliable distribution network, so innovation could be brought from that sector into water, for example. Or another example, bringing knowledge on digital technology data in the internet of things, so they have a vast potential for the water sector, from improved treatment technology to sustainability and efficiency management or innovation around sensors, or improved data for decision-making and improving customer satisfaction. So after that short summary, I'm going to hand over to Caroline who's going to talk more about the assessment criteria.

CW: Brilliant, thanks, Sophie. So yes, as Sophie said, I'm going to just talk a little bit now about the assessment process and the criteria. And as previously mentioned by the other speakers within the team, the Water Discovery Challenge welcomes entries from all sectors, and the innovations can be from anywhere in the world. However, the organisations entering must meet our eligibility criteria that Sophie has already touched on, but just to reiterate, entrants must be a UK incorporated entity, hold a UK business bank account upon entry, comply with the competition terms and conditions, and not be a regional water or waste water company in England and Wales. And as Caecilie said, if you want any more information on those eligibility criteria or anything else that we're talking about, please do visit the competition website and download a copy of the Innovators' handbook. So we're specifically seeking entries that propose those really bold, ingenious innovations that can help solve the biggest challenges that we face within the water sector both today and into the future. All eligible entries will then be evaluated by independent expert assessors against a weighted assessment criteria.

So those criteria are as follows: so 40% of the total score will be allocated through assessment criteria one, which is a positive impact for water customers, society and the environment. The second criteria is innovation enablers and innovation solutions and that counts for a further 20% of the total score. Capacity, capability and commitment to deliver is the third assessment criteria, and this accounts for another 20% of the total score available. And then the fourth and final assessment criteria, which again accounts for 20% of the total score, and assesses the entrants' proposed innovation against ability to succeed, to be sustainable, and/or gain wide adoption across the water sector. So again, more details of what we're specifically looking for under each of those assessment criteria can be found in the Innovators' handbook, a link to which should appear in the chat shortly. So an important point to note on this is that if we receive over 150 eligible entries, entries scoring badly against the first assessment criteria, which is the most heavily weighted, may not go on to be assessed against the remaining three criteria. However all assessed eligible entries will be moderated, and those making the shortlist will progress to a sector review, which Richard will tell us a little bit more about shortly.

But in brief, the sector review assesses whether the entry shows potential to deliver positive impacts, and whether it is innovative within the context of the water sector, and whether the entry shows potential to be viable within the water sector, all from an England and Wales context. So at this stage, the sector reviews provide a 'yes', 'no', or

'I'm not sure' response alongside with a short written rationale, but ultimately, Ofwat make the final funding award decisions, and they make this by taking into account the independent assessors' scoring and feedback together with the sector reviewers' comments and rationale. Next slide, please. So if you are successful, you can win up to £500,000 in total. This money will be split across the two stages of the competition, as has already been mentioned. So in the first stage, called the Finalist Award, up to 20 entrants with the most promising entries will be awarded up to £50,000 to develop their innovation. They'll also benefit from a range of non-financial expert supports, and access to mentoring from the water companies. Upon completion of the finalist stage of the competition, finalists will be invited to submit a development plan, through which they could request an additional 450,000, up to an additional 450,000.

If selected at this point, the winners will then work to further grow their innovation using both the financial award and the non-financial support on offer, to accelerate their progress. So I'm now going to hand over to Richard from Severn Trent, who's going to provide us with more insight and what the role of the water companies will be as the programme progresses. Thank you.

RP: Great, thank you. For anyone that joined late, I'm Rich Powell from Severn Trent. Pleasure to meet you all, and I'm here to represent the water companies across England and Wales today. So I want to spend a couple of minutes talking to you about exciting news about the sector led mentoring programme that we're going to provide as part of the discovery competition. Before I get into that, just to reiterate some of what Marc covered off earlier in the webinar, but there's a real level of excitement around what opportunity Discovery presents. The innovation managers who meet regularly and are collaborating across a number of fronts really believe the potential of Discovery, and the word 'game-changing' comes up quite often, and we're really excited to see it open things up to a new pool of innovators. So the water companies. Ofwat, and the partners on the call, have co-developed a great package of support which you can see in the various different parts of this slide. And this package of support will provide innovators greater access to the wider sector, and by doing this, bring through new ideas, and then hopefully go on to wider adoption. Both finalists and winners will receive support in the form of a mentor from one of the water companies.

This mentor will help support and develop their innovation. So just to touch on a couple of things, so in the finalist stage, these mentors will be allocated at random, and at the winner stage, the mentors will be matched to specific teams. At the end of the whole process, the full timeline, innovators will have worked with their water companies directly for about 12 months. So 12 months' access to the subject matter experts within said organisation, and I think it goes a bit beyond that. If you've worked with any of the water sector before, you'll never meet such a bunch of knowledgeable, helpful folk, and I think it's a great opportunity to open the doors and speak to those technical experts, and then beyond that, which will really help accelerate and develop your innovations. And just to see that there's so many on the call today I think just reaffirms our levels of excitement, and I wish you all the best, and look forward to speaking with you all soon. So that's it from me. Take care.

CP: Thank you so much, Caroline, Sophie and Richard. I think next slide. So just a reminder again, don't forget to add any questions that you might have to the Slido for our Q&A a little bit later. The link and the hashtag is in the chat, and it's also at the

bottom of all of the slides. If you didn't catch it earlier in the webinar, a reminder to anyone who's joined late that we are using Slido for our webinar later on. The link is open and you can add any questions you might have already. So we will move into next steps, and how to enter. So you have to submit your entry using the online submission link. You can find this on the website already. We are open for entries. It's also being shared in the chat now, in case that you want to have a look. To be eligible, again, I know it's been said before, you must be a UK incorporated entity and you must hold a UK business bank account upon entry. Just a note to say that you can actually start and save your entry form, your version on the platform, but if you wish to, you can also access all of the entry questions in a PDF format on the website so that you can have a look through all of the questions before you actually start your submission.

Do make sure that your entry is fully submitted before 12 o'clock noon on the 5<sup>th</sup> April, so that's 12 o'clock noon, please don't get that confused with midnight. It is noon, which is summertime at that point, on the 5<sup>th</sup> April. Slide? And, oh, yes, great, so throughout the entry period, there is going to be plenty of support available for any potential entrants such as yourselves. This is to ensure that all potential entrants have access to a fundamental understanding of the water sector and the opportunities it holds for innovation. So we are hosting a range of webinars that are designed to support organisations of all types of backgrounds to discover the water sector, its challenges and its opportunity, while also developing a strong entry to the challenge, and getting all of your questions answered in real time as you make your way through your entry. You're free to select any of the webinars that you might find valuable. You're also welcome to attend all of them. Each event is designed as a standalone event, and there'll be plenty of time for Q&A in each session, but you can also join the whole series throughout the entry period.

You can see all of the webinars and how to register on the website, and you can also follow the link that's being shared in the chat. And I think next slide, just to wrap up. So yes, just to wrap up what we have very quickly shared now, is that we opened yesterday on the 25<sup>th</sup>, and we will close on the 5<sup>th</sup> April. The competition has a pool of £4 million to allocate. Finalists can initially request up to £50,000 in seed funding, and winners can request up to 450,000 at the stage where they submit their development plan. Next slide? Great, yes, so thank you very much. This was a very quick sprint through the challenge. We hope it's been useful. There's going to be a quick poll that will pop up shortly. Please take a few seconds just to reply, and then we will very quickly move into the live Q&A. I'd like to welcome back Caroline, Sophie, Richard and Marc onto the screen, please. I can see that the Slido has been very busy throughout, so we will try and address as many questions as we can in the next half an hour. I think maybe if we stop the screen share, Liliana, we can get everybody back on screen. That's excellent. Okay, so we will start with the questions.

So UK RI Research Council Institute's eligible to apply? So this all depends on its incorporation entity. You'd need to be a UK incorporated entity. This includes any private limited company, limited liability partnerships, incorporated charities. So it is best to double check the legal status. We can't answer specifically on each individual organisation so the best suggestion we can get is that you check internally, get the legal status and make sure that you are eligible before you enter. The next question is, can universities apply to the challenge, including Scottish universities? Very similar to the other question, you need to be a UK incorporated entity. This includes incorporation by the World Charter, so again, please check with your specific

university on their legal status. They will definitely know, and that will determine whether you are eligible to enter or not. Companies from Northern Ireland, are they eligible to apply? Again, UK incorporated entity, if you are a UK incorporated entity, you are eligible to enter, so please check with your company what their registration is, and that will determine whether you are eligible for the challenge or not. Next question, does the challenge complement the Water Trial Reservoir? How is it different from the Trial Reservoir? I think I'll hand that one over to you, Caroline.

CW: Yes, thanks. Good question. It definitely doesn't compete with the Trial Reservoir. The Trial Reservoir is focussing very much on the near commercial end of a technology or a solution – well, specifically technologies in terms of the Trial Reservoir. So that's one of the fundamental differences in terms of that, the position along that commercialisation route. The Trial Reservoir only focuses on the TRL eight or nine which, some of you may be comfortable with that terminology, but that's basically near commercial. The other thing is, it only focuses on technologies, whereas this focuses on innovative solutions, so it doesn't have to be a technology, it can be a process, a method or an approach. So the Discovery Challenge is far broader, and we, because of that very nature, in terms of how is it different to the Trial Reservoir, we are looking at proving solutions in a live environment, and testing that it performs as the way we believe, and has been claimed it will do, and this, the fund there is an Evergreen fund, so if the programme of Trial is successful, then the applicant will ultimately pay that money back over time into the fund, whereas with the water discovery challenge, whether you fail or succeed, it's a grant basis, so the funds will not be returned to the pot. I hope that sufficiently answers the question.

CP: Great. We've got another question coming up. Sophie, this one's for you. Would innovative approaches to nature based solutions also be eligible?

SE Yes, thanks. Yes, they would be. Do make sure that you've set out how they feed into customer, society and the environment, and align with the four innovation themes, but yes, they would be eligible.

CP: Great. Thank you. Then there is a question here relating to the website information, so the webpage relating to Discovery stated that money must be spent within six months of the end of the project. It has the potential to extend into the phase two. So this is actually an old quote, so this, I think, is stuff that might have been published during the design phase of the challenge back in July. As the challenge launched yesterday, all of that information has been updated, so the spending restrictions is that the finalist fund needs to be spent within the finalist stage. So you need to spend the initial seed funding within the finalist stage. The funding requested in the development plans for the winner stage has no time restriction, but it's restricted to the activities that are outlined in the development plan. So that can be within the seven months, where you continue to work directly with the water companies and with your mentors, but it can extend beyond that, and then there will be some continued monitoring put in place if it extends past that. But it's definitely not restricted to six months, it can be flexible and extend further than that.

Next question, innovation meeting specific UK challenges can be found in foreign Marcets. Doesn't the requirement for a UK base act as a barrier for accessing innovation? I think I'll hand that one over to you, Marc.



MH Yes, no worries, yes. Yes, thanks. Look, we thought long and hard about this, and this probably helps answer a little bit of the first couple of questions as well. There are some practical measures around us as a UK based regulator releasing funding, and who we're able to pay, which has in some part determined where we've ended up on this. We've also considered that having a UK bank account, for example, and being an incorporated entity provides us also with some due diligence around a whole – for what we hope will be *[s.l. a whole bunch 00:35:45]* of organisations that we don't know at all, we certainly don't regulate, so there's a risk there that we're trying to carefully manage, and we think that by imposing those rules, that's going to support that, too. Now, what may – so yes, in terms of the question, yes, there's loads of great stuff out there in foreign Marcets, which could work in the UK basis. I don't think Ofwat is quite ready yet to fully be working with international agencies and organisations and innovators, and be paying into international banks and that sort of stuff, this is a – we are a very risk averse organisation. But there are other things that you can do here.

There may be partnerships that you can make with UK based organisations who have said UK bank account, who you can then work through to enter this competition as well. But yes, there are a few restrictions here for practical and historical reasons around our ability to work with different types of entities. So I don't know if that's going to be particularly satisfying for those of you who are internationally based, but that's, I'm afraid, the best that we can do at this moment in time.

CP: Thank you very much, Marc. Next question coming up, any IP implications to the challenge? Does the IP remain with the innovator? Yes, it does. So very differently and new to the Ofwat Innovation Fund, there are no IPR for the Water Discovery Challenge, which means that the IP does remain with the innovator throughout and after the challenge. Next question coming up, Caroline, this one is for you. Can you clarify the TRL levels? I think this is probably in relation to our innovation maturity framework, different meanings in different sectors.

CW: Yes, again, another good question, and very right, there are different meanings in different sectors. In terms of what we're looking for, there obviously is a range from two to six roughly, so in general, that's looking from a concept through to having a prototype that has been tested and is performing almost close to what you would expect it to be performing within a live environment. So there's a really wide range here, but I think the key thing here is to go to the Innovators' handbook and read what the definitions within the innovation maturity section is so that you can ensure your solution fits with those descriptions in there. And in that sense, it's irrelevant what the TRL meanings are, because ultimately we're working from the innovation maturity. We've provided that TRL terminology because that's sometimes more commonly used by certain developers of innovations, so it's as a reference point, but by no means use that as the ultimate guide. Please do look in the innovators' handbook and check against the innovator maturity scale.

CP: Great. Thank you so much, Caroline. Pulling one up here, Rich, I might throw this one your way first, and then Marc and Sophie, you might want to feed in after as well. There's a question here asking if the sector is trying to reduce emissions, and if so, what targets does it have? Is this covered/implied by the objectives listed in the desk, which I think means the innovation themes? So if I'll hand that to you, Rich, first, and then Marc and Sophie, feel free to feed in after.

- RP: Yes, thank you. Just making sure that I'm off mute. Yes, great. So absolutely, yes, and it ties into the themes that were in the deck. I think one of our five innovation needs is around how we can decarbonise energy, transport emissions, and be more efficient, and looking at alternatives to things such as fossil fuels. So yes, absolutely, targets we've made as a sector is to be net zero by 2030. We're already seeing a lot of activity through the other two Ofwat competitions looking at new ways of working and technologies, so absolutely on the agenda. And in addition to that, from a, I guess, digital and measurement point of view, we're really keen as a sector to better understand how we monitor and measure emissions so that we can then truly understand those emission levels and then look at how we can then look at optimising that treatment process, and then capture that pollutant and stop it from contaminating the air. So there's lots of innovation requirements in that space, so definitely one that we're interested to hear about. Hopefully that answers the question. Marc or anyone else, please feel free to add.
- MH: Yes, I don't think there's much more to say on that, other than this is one of the reasons, the very reasons for the innovation fund existing is to accelerate the coming forward of these solutions to address those very issues, emissions and other climate related areas too, so yes, a great, full answer there. Thank you, Richard.
- CW: You're muted, Caecilie.
- CP: Sorry about that. Just wanted to check, Sophie, if there's anything additional to add? Nope? Great. Caroline, we're going to ping the ball back to you, I think. Can you provide an overview of what challenges the water companies are facing, and the priority of those challenges?
- CW: Another good question. My advice on this, there is lots of information available externally already on what the challenges are being faced by the water companies. I do really recommend that you register for the series of webinars that will follow this programme, so starting from next week through to early March, we have a series of webinars that are aiming to support you understanding what those challenges are, and where the innovation opportunities exist, and you'll be hearing from water company representatives as well as academics and different providers and stakeholders of the water sector in that. If you want to do any pre-reading, I would highly recommend you read the water 2050 strategy which was developed collaboratively by all the water companies, and highlights and prioritises their challenges as they see them over the future and the coming years. Yes, please do register for the webinars, and we'll do our best to provide you with the information in addition to the strategy documents already available. Rich, I don't know if you want to answer.
- RP: Yes, I was going to come in. I think you've covered off the water innovation strategy, and I think I just want to re-highlight, we have worked with Marc and we've worked with everyone on the call [*inaudible 00:42:52*] identifying areas of innovation requirements. But I think Discovery is a reminder about, there are areas where we're doing lots of innovation already, and we think, God, we've got some great opportunity here, but this is about finding new stuff, so a thing that we haven't come across yet, and I think that's what's different with Discovery, than we've got in Catalyst and Transform, which are the other two competitions, it's opening that door up to those technologies that we may not have seen, those smaller scale stuff. But there's lots of

information out there, whether that be the water innovation Strategy, on most of the water companies' websites there are specific innovation strategies as well that go through a regular cycle and say, "This is the way that we work as an organisation," and these are our greatest needs of innovation. But it is very much open, and looking through the chat, there are lots of questions, whether that be through the Zoom chat or on Slido is, are we interested in that, are interested?

I think it's about getting those in there because it's a bit of the unknown sometimes, and I think that's what makes this so excited and really interesting, and we're waiting to see what comes through. So I'm sure Marc can talk about the application process, but it's going to be quite an easy thing to then get in front of the judges to get a bit of an assessment. So anything goes at the moment. We're not closing the door to anything, so I think I've made my point, but yes, I'm really, really excited by it all.

CP: Great. Thank you so much. And yes, just to reiterate what Rich was saying there as well, that the document outlining all of these innovation opportunities is linked in the Innovator handbook and it is available on the website as well. So if you do want to have an initial gauge of what the particular opportunity areas are, you can have a look there, and then definitely advised, like what Caroline was saying, to join the webinar series and you'll get lots more information about the water cycle and the challenges faced in each step throughout that as well. Let's have a look at the next one. Can you apply if you don't have a set place to test your product, as in a site for trial, but you don't have one lined up yet? So, yes, indeed, you can. So part of what Discovery is doing is very much opening up access to the water sector. If you have an early stage idea or solution, you can definitely apply with that, and then part of the support that we will provide is to help you validate that idea and get it ready for potential testing and trialling at a later stage. So both the delivery team, the support, and also the mentors that you will have access to, will definitely support you with that. I can see you're nodding, Rich, so I think you are agreeing with that.

RP: Yes, no, I think there's lots of opportunities in that space there with the facilities that exist across England and Wales, and the operational sites that the water sector have, obviously. I could just talk about Severn Trent, so we've got Resource and Recovery Innovation Centre, so one of a kind in the UK – sorry, my screen's just interrupting a little bit there. So yes, we've got a plug and play test facility, where we're able to trial equipment in a safe environment with no risks to water quality. So there are opportunities through our mentor programme, so we'll actually, if you've got some technology you're looking to trial, we can identify the right opportunities. And that might not be the Severn Trent location, it might be another water company or one of the other facilities that exists, so yes, don't let that put you off.

CP: Great. Here's one about costs. Are there restrictions on eligible costs, institutional overheads, would they be eligible, or would it be direct costs only? Marc, do you want to take that one, or do you want me to jump in first?

MH: Yes, well, I'll just say I think part of the whole point of the competition, really, is to help move forward the solutions that you have, and that first round of up to £50,000, and correct me if I'm wrong Caecilie, you can determine how you use that exactly to take forward your solution, but we will be asking about what that use of the 50K will look like through the application process.

- CP: Yes, exactly. So we are asking for you to outline what the plan is for the spend, but there's no direct restrictions on it apart from the time restriction of spending it within the finalist phase. The spending, the cost and the spending of your winners' award is restricted to the activities that are set out in your development plan, so that will tie the funds to what you have presented in that, but yes. Next question, foreign companies could quickly incorporate and get a bank account if they were a finalist. Is it possible to apply first with an exception to incorporate when appropriate? No, it is not. So you need to be eligible upon entry, not at a later stage. So you will only be eligible if you are incorporated and you do have a bank account. So part of the eligibility questions in your entry form is to select your incorporation and to add your incorporation number, so unfortunately it's not something that can happen at a later stage. It has to happen before the 5<sup>th</sup> April, and before you submit your entry. Are you looking for a geographical spread across the country? I will ping this one over to you, Sophie.
- SE: Yes, sure, so there are no specific geographical locations we're aiming for, but I guess in terms of the – we're aiming for a diverse portfolio of entries across geographic locations.
- MH: Yes, maybe if I can just jump in, if we've got some really difficult final decisions to make, it may be that that could be one of the factors that weigh in at the end, if there's a dearth of innovations that are from a particular part of the country, or will be affecting a particular part of the country potentially. So yes, the diverse portfolio is the key bit here, and we certainly don't want this to be, for example, completely London-centric. We want to see ideas that are sprouting from all corners of the country, and wider than that, of course.
- CP: Great. I will jump onto the next question. Marc, I'll ping this one your way first, but then let me know, I can jump in at the end as well. do you have plans on how you will assist on further adoption? This is the hardest part, if winners are left at the end, key stage adoption is unlikely.
- MH: Yes, so what we hoped we've designed, particularly when you get through to the winners' stage, where the ten will be left, is a really close working relationship with the water companies that you were partnered with, and indeed, the wider network of water companies that are supporting the whole process. So part of our hope here is that those relationships will be forged, and the pathway for your innovation, and it can go a number of different ways at the point of the Discovery challenge concluding, it may be that you continue that relationship with the water companies, it may be that you look to one of our other competitions where there's more money on the table, and they're targeted at the later stage TRL levels as well, or there might be another route for you at that point. So in terms of pathway, there's a few different ways we expect to see this end, but we definitely recognise the difficulty with adoption, wide scale adoption across the sector. This is a historic issue, and there are other things that we hope to do for the next couple of years through the Innovation Fund to support much better efforts in ensuring wide scale adoption. So there will be aspects of that in the Discovery Challenge, but there'll be other bits and pieces that we're very keen to ensure happen as well to support that.
- CP: And I think the ball stays with you, Marc, for a little bit longer. Is there a knowledge base for current critical challenges in detail?

- MH: Well, I think I'd refer you there to Caroline's previous answer around the webinars we've got coming up, but also, there is some detail in the documentation, which we have worked very carefully with the teams in the water companies to indicate those areas of particular innovation interests at this moment in time. So they're some interesting guidance points for you there, but as Rich said as well earlier, we're wide open to absolutely anything at this moment as well. If there's something completely novel, really interesting and potentially transformational, get it in there.
- CP: Great. Thank you. This one, let me ping that one first to you, Rich, I think, and then Marc and myself can pick it up afterwards if there's additional information, but how much time is allocated to mentoring? Is there a structure in place for the mentoring, or will it be decided on an individual basis?
- RP: I'll pass that one to Marc because we're in discussions and Marc's got the pen on the final agreement on that one, if that's okay, Marc?
- MH: Yes, absolutely right. So yes, the mentoring is definitely not unlimited. There are some restrictions around this due to, well, of course, some resourcing issues that we're trying to manage here. So we're looking at about 20 hours of mentoring support in the first instance, and that will be probably a combination of some meetings, some ad hoc conversations, and some other bits and pieces that might turn up along the way. So there will be some restrictions to that. This is not a – you can't phone up Rich all hours of the day, seven days a week all year round for advice. There will be some restrictions to that. But what we've designed, we hope will provide more than enough of that mentor coverage with the water companies.
- CP: Great. Thank you very much. I think we are maybe jumping into some kind of cluster questions. We've got about seven minutes left so we might try to address some of these in quick succession. So starting with eligibility, do entities have to have a minimum trading history, i.e. are brand new start-ups eligible? Yes, they are, if you are incorporated and you have a UK business bank account before the 5<sup>th</sup> April, you can submit your entry and you will be eligible. Can products be hosted by Scottish Water? I'm not sure exactly what is meant by hosted. I don't know, Rich or Marc, if this is a common phrase that you're familiar with. If you are in partnership with Scottish Water or submitting as Scottish Water, technically, yes, you should be eligible as Scottish Water is not a water company within England and Wales, but I don't know if you want to feed into those ones.
- MH: Yes, I think we're wide open to any of the water companies in the British Isles, and indeed, around and about Europe and beyond to enter, notwithstanding the requirements of the banks accounts, which we have laboured quite strongly already.
- CP: Yes. PLCs, public limited companies count as a private limited company for the purpose of eligibility. If you are a UK incorporated company, you are eligible. If you have any specific reason to be in doubt, please do check the legal status within your own company. If you still have problems or still have issues, please do email us directly. But yes, if you are incorporated, formally incorporated in the UK, you are indeed eligible to enter as long as you do have a UK business bank account as well. I represent a BIS Innovate UK funded RTO. Are we eligible for funding? Yes, having received previous funding does not make your ineligible, however do consider the

stage of your project, what stage you're at looking at the innovation maturity framework that we have to make sure that the support provided is suitable for you, but there shouldn't be anything making you ineligible through your previous funding. Can one company have multiple entries? Yes, you can. You can submit more than one, but they have to be completely separate projects. You can't submit the same project multiple times. Can an entry be a consortium of a few partners of academics and industry partners, and is that an advantage for an entry? I can take that, but also maybe I can ping that over to you, Caroline.

CW: Yes, you could be a consortium, so you can be working in partnership but there needs to be a lead entrant that will be the recipient of the money and the funding, but then the further ongoing mentoring and support could be then split and divided between the partners. But the clear aims and ambitions of the innovation development need to be set out and an understanding of why those partners are involved, and what their role will be in the accelerated progression of the solution towards commercialisation. Is there anything you would like to add to that, Caecilie?

CP: No, I just think exactly that, so as you enter, you will enter as one organisation, so if you are academics and you are partnering with an incorporated organisation, the actual entrant will be the incorporated organisation. That will be the entrant that will deal with the competition, and then everybody else who's involved will still be involved, but they wouldn't be formally entering the challenge, but it would be the organisation that holds the UK incorporation and the UK business bank account that would apply, and formally be in the challenge. We support – oh, something moved around. We support environmental organisations helping them to innovate and scale their impact. Would a training provider be eligible? Caroline, do you want to pick that one up, or shall I start that one?

CW: I'll start, but feel free to add to that. I think we're open to all of the ideas, but the important thing is to make sure you link back to the four strategic innovation areas and the challenges within the water sector. If the training provision doesn't link to those, then I would suggest you maybe have a rethink. But if you, yourself, believe that the offer you have, that innovative approach to a particular challenge area could address some of those problems that we know we face now or into the future, then absolutely please do apply. But it's about just going back and checking against that, the criteria, the assessment criteria and the needs that we're assessing against. Please feel free to add anything to that, Caecilie.

CP: No, that's great. That's great, thank you. I'm just going to pick up one that I can see has quite a few requests. Is there matchmaking available to help participants who are seeking partnerships to find each other? So I think it's just important to note here that matchmaking is something that we've had in place for previous challenges because it was a key eligibility criteria that you were in partnership with a water company to be eligible to enter, for instance Innovation in Water or the Breakthrough Challenges. That is not an eligibility criteria for Water Discovery, so there's no direct matchmaking available to help various participants seek partnerships. There should be no need to be in a partnership, as you should be eligible to enter the challenge on your own. If this is about being an academic potentially wanting to partner with a UK incorporated organisation, that's not something that we have directly in place. It will be really individual to each individual solution, each individual idea, so it will be very difficult to run an even matchmaking process for everybody for that.

If you are looking for someone or you have any questions on that, do feel free to email us directly and we'll see if we can address that in some way. But my only advice would be to really join all of the webinars, join the support available, connect with other potential entrants, and see if you might be able to find some like-minded through that, that you might be able to partner with if there's something in the eligibility criteria that means that you're ineligible to enter by yourself. I will jump – ugh, it's 1:30. I might just jump to one or two questions on the fund before we will formally close off. So with a £2 million fund and 63 spent until now, plus the four for this round, this should be over 130 still to be spent. When and how will this be spent? I think that's a question for you, Marc. Someone has done the math.

MH: Yes, great, well, I also – yes, very good. I also mentioned that we expect to spend another £40 million by probably May time this year, and then we've got two more competition rounds, both will have approximately £40 million in the pot. They're our existing competitions, the Water Breakthrough Challenge, which we divide into Catalyst and Transformer, lower value and higher value competitions. So they remain our, sort of, the meat and drink of the Innovation fund, if you like, and this £4 million that we're putting on the table for Discovery is sort of a nice top-up to that. We're yet to make a decision on whether or not we will run another round of Discovery, say this time next year. That decision will come over the next six months or so, I think. So yes, plans are in place, that money will be spent, I hope – it does depend a little bit on whether the ideas are good enough. We won't spend money on duff ideas. The quality has to be there. The transformational aspects have to be there as well, Caecilie, there's one more, I think?

CP: Yes, I think let's just take this one more. That's about the fund as well. So PR14, a further 100 million of funding was announced. Does that mean that further competitions will be announced these years following this one?

MH: Yes, so a couple of things here. The £100 million was very specifically announced around a Water Efficiency Fund. That will kick off in a couple of years, at the start of the next Amp. The detail on that just isn't there at the moment, but I think it's the first time we've really, in this sort of context, targeted a very specific area like that. That may be competition based, that may be grant based, we don't know. There's lots to work out there. But the other piece of news that came out of PR24, the Final Methodology was that this innovation fund will continue all the way through to '29, '30, and there'll be £300 million at least in the pot for that five year period, so there's going to be great consistency and continuation here. We can make a massive change and impact with this money and we're really excited, if I can take the moment to wrap this up, with what Discovery could deliver for us, and we know there's not a huge amount on the table in terms of money at this point, but all that softer, non-financial support we think could make a real difference in bringing forward some of these exciting ideas that you guys all have. So please, please get your entries in.

CP: Great, and with that, we are already two minutes over time. I am aware I can see that there are still questions, that unfortunately is not quite answered yet. Some of them are overlapping, so we hope you've got all the information that you need. But as I mentioned in the beginning, if you do have questions that are unanswered please feel free to shoot us a quick email, and come back on Tuesday and Thursday next week where we'll continue the entrant support package with additional webinars on

introductions to the water sector, and the innovation opportunities that sits within. So thank you very much, Marc and Caroline and Sophie and Rich for joining us today. Thank you to the 400 people in the audience, and we'll hope to see you next week.