



**Discover how we can combine our
efforts – a partnership approach**

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Key:

CHP = Caecilie Hougaard Pedersen – Delivery Team

AG = Arlene Goode – ARUP

CT = Charlotte Thompson – ARUP

PJ = Phil Jones – Anglian Water

TR = Tom de la Rosa – Environment Agency

JR = John Rumble – Affinity Water

CHP: Okay, I think that we will slowly get started just as people are still ticking in and attending. But welcome everyone. Welcome to anyone who's joining for the first time, but also welcome to people who have been with us the entire entry period. This is now our ninth Webinar in the series and we're going to be looking at how we can combine our efforts and taking a partnership approach through the water sector. So maybe slide, great. Thank you very much. So these guys just very quickly welcome to all of our speakers today as well. So we've got Arlene and Charlotte joining us from ARUP, and then Tom and John and Phil joining us from EA, Affinity Water and Anglian Water as well.

So firstly myself Caecilie, I am from Challenge Works and I am part of the team that's collaborating with Ofwat on the delivery of the Water Discovery Challenge. Arlene and the rest of our guests today, I'll give you a quick 30 seconds just to introduce yourselves to our audience today and let them know who you are and your role within the company before we get properly kicked off. So Arlene we'll start with you.

AG: Thank you very much, Caecilie. I'm Arlene Goode, I'm associate director with ARUP. I have 30 years plus experience in the water sector and leader of Innovation Advisory Team and technical and project director for the Innovation Fund delivery partners on behalf of ARUP. Thank you.

CT: Charlotte Thompson, I work in Innovation Partnerships in ARUP developing new digital solutions that we can either scale for use within ARUP or our clients, all across ARUP's business including the water sector. Thank you.

PJ: Shall I jump in there then? So, Phil Jones, I'm the innovation funding and partnerships manager at Anglian Water. So my role has been focused on helping to develop and rock some of the submissions into the Ofwat Innovation Fund and then supporting with some immobilisation of those that have been successful in as well. My background is heavily focused more on sort of flood risk management side of working.

TR: Brilliant, hi everyone. I'm Tom de la Rosa from the Environment Agency. I'm a programme manager of the Flood and Coastal Innovation Programmes. So projects which are working to test and pilot new approaches to floods and coastal risk management. Thanks.

CHP: Thank you very much everyone. So just a quick note to say that John Rumble actually is not able to join us live today at Affinity Water. But we will be checking back in with him, he has submitted some great video content for us to share. So we'll share that a little bit later on in the Webinar slide.

So yes just before we get properly kicked off this is a little bit of house-keeping. So you would've already seen in the chat that we've got the team ready there to chat to all of you, help you with any questions or problems that you might have. So if you've got any issues with Zoom or throughout the Webinar feel free to shoot the team a message in the chat and Elektra will be ready to help you.

For the second part of this Webinar we will be hosting a live Q&A. So for the Q&A we're using Slido, so you can use the QR code that you see on the screen or the kind of link that's being shared in the chat. So access Slido and then you can ask all of your questions to the panellists for the Q&A at the end of the Webinar directly there. If you've got a question for a particular speaker you can add the name directly to your question and then we'll kind of ping it to the right person. Otherwise we'll open up the question to the full panel when we get that far. Well, I think before taking up any more time, Arlene I'll hand over to you to us to kick off for today.

AG: Okay, thank you very much and thanks Caecilie. So good afternoon to everyone who's joined us. I'm going to be guiding you through the presentation today and the Q&A session afterwards. Just as an introduction there is no doubt that delivering change through innovation is more effect when leveraging a partnership's approach. Due to the nature in particular, the water sector, this is particularly the case and if you attended some of our other Webinars in the series, you'll see just how complex and interconnected the various elements of the water sector are. We've observed that projected funded from previous competitions are being delivered by some really strong partnerships, and we are seeing a real increase in the breadth and diversity of those partnerships, with some really interesting results. So we wanted to provide you with an introduction to the importance of those partnerships and the delivery of innovation initiatives, and explore some of the key stakeholders across multi-partner delivery with you in this session. So I hope you enjoy it.

Firstly, you're going to hear from Charlotte on the importance of partnership working and that's going to be drawing on her experience from Innovate UK KTN and then the digital product development within ARUP. We're then going to hear some really good examples from Tom based on the experience of the partnership working from the Environment Agency's Flood and Coast Resilience Innovation Programme. John from Affinity will talk to us about Seagrass Seeds of Recovery Project, which is a project funded through the Innovation Fund. Then last, but by no means least, we've got Phil who's going to talk us through how Anglian Water approaches its partnerships. Then we're going to follow up with a Q&A. So please do pop your questions in Slido as Caecilie says. So I'm going to hand over now to Charlotte, so thanks Charlotte.

CT: Thank you. I was thinking about how I would set up a partnership, so hopefully I can share with you like why and how I would consider doing that. I think the first part to me is that sometimes when we're engaging in a potential new partnership, it's sometimes hard to understand whether actually they're a competitor or a collaborator. Certainly within the water sector, which is overall probably quite new and mature, there are probably certain aspects of the water sector that are immature and it's in those areas of immaturity that there will be new solutions being developed where it's an opportunity to compete. But actually when we're looking at some of the more mature aspects of the water sector, whether it's existing players and interconnections, as Arlene was talking about, actually this is a real opportunity to collaborate to bring your solution to market. Next slide.

So where we're looking at discovery phase projects and you're evaluating that commercial viability, technical feasibility and the user desirability of the solution that you are developing. Where are your strengths and weaknesses? And where can you look to partner with existing players to address those weaknesses or actually accelerate your development? Or, if anything, provide being that critical friend to challenge your assumptions about where you are looking to develop and deploy your solution. Next slide.

So one of my favourite diagrams for explaining that wider ecosystem and partnership piece is this diagram here on the right from MIT REAP Framework. For me it's about well what's the point of partnering? What is your purpose for collaborating? Often we think this is about the direct development of your solution. Whereas actually we can look to develop partnerships for lots of other reasons for accessing funding, amplifying your message, creating more influence with regulators. What is it that you are trying to achieve from this partnership?

With that mission, who are the types of organisations that you can look to partner with? That could be existing businesses, it could be government public sector organisations, funders, research organisations and not-for-profit type organisations. So when we're thinking about partners I think we can talk and think very broadly about the people that we can work with.

Then the outer ring of that diagram, there is that kind of enabling environment in terms of the market, institutional context and legal and regulatory requirement, and

then the resourcing side. So actually what is the capacity that you need to deal build within your organisation to enable you to deliver the solution.

Two examples of that from the Ofwat Innovation Fund, one on AI operational resilience and the other one for evaluation tools for flood risk. What I want to draw out here is these are transformational programmes. They require a system wide view and multiple solutions in order address challenges and, as such, you have organisations working across the breadth of that framework, businesses, government, different parts of the supply chain, research organisations. All are working at innovation at different levels of maturity to solve that overall challenge and a multitude of those will end up getting to market. Next slide.

So for me, the benefits of partnering is to really challenge your assumptions about where you're going in your direction and getting that from lots of different stakeholders. That actually, through partnering, can you de-risk taking that development journey as well as going to market? Can it help you accelerate by having greater access to resources of expertise and technologies? Then how can you lower the barriers to entry for taking your solution to market, particularly from a contractual procurement perspective, meeting legal and regulatory requirements? Then through partnering, can you actually scale your solution more effectively, moving from those first two clients to 2030 and beyond?

However, the challenges with partnerships is that we need to be open in what we're trying to achieve, but not necessarily in those early phases about how we would go about it. So that you can spend time building trust with potential partners, aligning your missions and discussing then how you would go about it when you have the right intellectual property, protection and trust between partners on how you would then get into the details of how you would work together.

So, maintaining those levels of communication, being open and giving time to developing these partnerships are really important, and understanding each other's motivations so you can make sure that all partners are gaining value from those collaborations. Next slide.

So, how to find a partner? Here's just some of the areas where you can see people who are already operating or are looking to enter the water sector. So getting out there and attending conferences and industry showcases and engaging already with industry bodies and innovation networks to help you be aware of what's already going on, but also who you might like to work with. So that's it from me. Back over to you Arlene.

AG: Thanks very much Charlotte that was great. Now I'm going to hand over to Tom de la Rosa from the Environment Agency. Over to you, Tom.

TR: Thanks Arlene. So just a quick introduction to the Flood and Coastal Innovation Programmes. So this is a DEFRA funded six year collection of three programmes. We've got 31 projects currently within the innovation programmes led by consortiums which

are lead in turn by risk management authorities and environment agency operational areas.

So if we just go to the next slide. Before I jump on to some of the challenges which are a bit more specific to flooding coastal risk management, I just thought I'd provide a bit of a picture of the partnership context of Flood and Coastal Innovation Programmes or FCIP for short. So we current at last stocktake have around 300 partners or so involved in projects either directly or involved with us as the central programme. There's an awful lot of partners, but we do have variation within that of projects who have no partners and projects who have upwards of 40 or so, and those are partners who are directly involved either in resourcing, governance, data provision. So we've got a lot of case study of knowledge to draw on. Projects are coming up to the start of their third year now and have been working for the last two years.

So you'll have heard from Charlotte a couple of these challenges recognised and wanted to pull out the ones which I think partnership can actually play an active role in addressing. Then also provide a bit of a picture of what the general model for partnerships seems to be, certainly from our programme. So legislation, a big one that Charlotte also mentions. Legislation is a constraint to innovation. It can be very difficult, flooding and coastal risk management is heavily legislated as is the water sector generally. The fact that there's rarely a simple solution for the types of problems that we're trying to innovate for. It could be difficult when you've got lots of levers, some uncertainty and you're trying to innovate on one aspect. Often it's easier just to try and limited the scope of innovation, but it's quite difficult with these big, complex projects.

Public perception of having to have all the answers. Now this is a really big kind of soft one that doesn't normally come through. As a body the Environment Agency and local authorities that we work with they are often required to almost provide the confidence to the customers, the partnership partners that we're working with that we do know what the right thing to do. But actually that's a bit of a barrier to innovation. Often the best innovation comes when you say you don't know and be able to join partners to provide solutions that you otherwise might not have.

Space, resource, time, money, I won't expand too much on those, but they are an ever present constraint and barrier. Then just the amount of people involved, similarly to the scale of the problems that we're trying to solve, the scale of partners and different types of those partners. It's fast as well.

So on the right hand sides of the slide deck here, I've just showed a rough working of what the general model for partnership on the FCIP project is. We can generally group partners into four main categories, being communities being the biggest one. So in the water industry side that's effectively customers. The people on the ground, the communities, the businesses. We have researchers which could be a combination of industry bodies or academics. We've got suppliers, the market effectively, those out there with skills, knowledge, expertise, experience and then we have the dreaded government agencies.

I have specifically chosen the 'men in black' reference here, because often this can be one of the biggest barriers in that there's nothing worse than a government agent or big public water company knocking on the door and saying, "We've got an innovation". Actually that can be quite challenging in terms of engagements and trying to get people on board. So each of these groups has strengths and weaknesses. If we go to the next slide please, I'll talk a little bit about some of the actual concrete lessons learned that we've got from FCIP and hopefully some things which you can take into account to make life a little bit easier.

So by far and away the biggest one is a cultural shift and that is recognising, as an individual, as an organisation, what your limitations are and being open and transparent about that. It's one of the most effective things that we've seen in projects on FCIP. Whether we've got project teams who say, "Actually we don't have a clue what the idea is, because by that way you invite in partners and you invite in solution and you bring others to the table to hopefully help you innovate. Ground up, top down governance. So when you are working with partners, you've got them there, you need two things. You need to have your higher ups, your senior leadership engaged, sighted and on board with the principle of working together.

You also need to have the on the ground relationships, the working coal face relationships with people across those organisations. Partnership doesn't work if you are missing one of those key pieces. So it's just something to bear in mind as a tangible action. Check your level of engagement with partners who you're working with and make sure you've got both that top and bottom sorted. With partners, there is no time too early to get them involved, whether that's just an email, a letter of intention, something. It pays dividends down in the long run in that things like intellectual property right negotiation, trying to secure data from partner organisations is damn right easier when you have something, doesn't matter how high level agreement it is. But if you have something that you can refer back to then all of these negotiations come from a far better and easier place. Instead of waiting six months trying to negotiate access, you'll be able to do it far, far quicker.

Ownership on Teflon shoulders. So this directly relates to the point mentioned earlier about trying to have all of the answers and all of the solutions. Actually, you need to be comfortable with what you can't do and what you're willing, as an organisation, as an individual, and what you're willing to work with us and pass over responsibility to other organisations. This, for me, has been one of the scariest things about the Flood and Coastal Innovation Programme, but it is really worthwhile. So challenge yourself in a couple of ways, not necessarily to have all the answers, but also to say what answers you aren't able to have.

A slightly less point, just to end on, is the value of monitoring and evaluation. Partners pay a massively key role on this. No individual organisation has the breadth to be able to monitor and evaluate all aspects of a particular innovation. Each partners will bring to the table their own kind of particular areas of knowledge and expertise and it's one of the things that partnership can really add value to is hopefully some of those conclusions that your innovation project draws, and it adds a bit of weight to them.

I thought just before I close, just a final muse point if that's alright. Just on the reflection that innovation doesn't have to be new, and by getting partners to the table you actually might become aware of innovation which is already in existence that might be new to you. On the left there is an example of some Roman concrete. If anyone's been looking at the news recently they've supposedly recently discovered the methodology for developing Roman concrete. Previously, we've always know what the ingredients are that the Romans used for their concrete, but never quite understood how it lasted so long and it's only recently that there's been a bit of an innovation around as well by mixing all the ingredients hot. You generate these blastocysts of lime within the concrete structure, that when concrete naturally deforms cracks. Those cysts are able to receive water and fill out and, not self-repair but, fill up some of those voids.

So just a final point just to recognise that innovation does not have to be new. It just needs to be new to someone and I think I'll end there and back to you Arlene, if that's okay.

AG: Thanks very much, Tom. Some really great insight there from your experience on the Flood and Coastal Innovation Programme. We've now got a video from John Rumble from Affinity Water and he's going to talk us through Seagrass Seeds of Recovery, which is a winner from a previous Innovation Fund round, on what they gained from the fund, what they considered when developing the project and how they've been collaborating closely with partners and delivering it. So I'm going to leave the IT challenge there up to Sophie to hopefully make it work.

JR: ... with the Innovation Fund was we recognised we had an issue to deal with as part of our net zero ambition, where we were looking to find alternative ways of actually looking at how we manage carbon and one of the ambitions we had was to explore opportunities to look and verify and account for carbon sequestration. That's something that, as a business, we know will be a big part of our ambition around carbon reduction.

In applying to the Innovation Fund for the Seagrass Seeds for Recovery project, we took a long term view. In that project was an opportunity for us to explore an alternative approach to looking at carbon sequestration and look for an opportunity that would give us the ability to look at carbon sequestration in a different environment than that which we would normally look to explore.

So working with key partners, such as Project Seagrass, but also with the University of Essex, University of Oxford and some industry partners such as Anglian Water. The project was created to explore opportunities to develop a seagrass nursery, a means by which we could raise seagrass plants and look at them for transportation for pilot trials in the sea just off of our supply area. We have successfully developed one of the first seagrass nurseries in the UK, based in South Wales with Project Seagrass. That part of the project is up and running and is there providing basic plant stock for some pilot trials which we're hoping will begin in spring this year 2023.

Those pilot trials are all about establishing new seagrass beds and looking at the opportunities to see what rates of carbon sequestration we can get with those new seagrass beds. So the project has been really valuable. I think for a sum total of just under a quarter of a million pounds, we have a new seagrass nursery. We have a lot of working looking at the evidence-base required for a [unclear 00:25:36] carbon codes for seagrass beds and we should have some evidence from UK based trials that will be some of the first of its kind off the English coast.

Overall, where does Affinity see this going? If successful, it forms part of our overall approach to carbon sequestration as part of our net zero ambition and part of our net zero activity.

AG: Okay thanks, that's great. That was quite an abrupt end there. So great time then, thanks to John for recording that for us. I'm going to move on now to Phil Jones from Anglian Water, who is their funding and partnerships manager. Over to you, Phil.

PJ: Great, thanks Arlene. So I'm just going to cover off a little bit about how we've approached some of our partnership workings, specifically through the Ofwat Innovation Fund. How we've gone about developing some of those partnerships and covering some of those challenges that Charlotte alluded to in her presentation. Can I have the next slide, thanks Sophie.

So just a really quick overview. So we're leading on five projects through the Ofwat Innovation Fund, covering a variety of different areas as you can see there. Overall around 65 partners that we're joining with across those projects. So ranging from five on one project up to almost 25 on some of the others, so a big range of scale of those partnerships as well. Lots of different sectors involved in some of those, academia, innovators, software providers, local authorities, lots of different sectors, lots of different viewpoints, but lots of different learning as well that we can bring in and help explore as part of those projects. On top of that we're supporting a further 13 projects as well from other water companies. So collectively as water companies, we're sharing, we're learnings ideas as well and we're making sure we're partnering together on those.

On the right, just covering some of those benefits that I think we've picked out. So bits around additional funding being leveraged throughout the partnerships, in kind contributions we've seen, such as PhDs and things like that and obviously access to some of those wider networks to support some of the dissemination of what we're learning as part of these as well. If you can move on to the next slide, thanks Sophie. That's great.

So, how we've, I suppose this is just a brief overview of how we started to establish I suppose some of those partnerships and what we've started to use a little bit more as our approach in some of those. Obviously through the Water Discovery Challenge, they'll probably be less of this at the start, but more of this when we're looking to scale up and you might be looking at future funding or future opportunities in there. But generally starting with a bit of an idea, either coming internally through the business or it could be coming from the supplier or supply chain or whoever that

might be. So we've had a look at those opportunities, had a look at those challenges and just to see are those ones that we want to take forwards? And if yes, we then look to what we're saying, establish a bit of a core team around that.

So what we really think about here is having four or five, maybe, partners from different sectors, ones that between those initial couple and whoever generates the idea, we know might be active in that sector, might've done a bit in there already. Or it might help to just develop these a little bit further, bring those together. What we take to do is what we call a benefits realisation mapping. But effectively, what that is is just understanding why we're doing this project, develop some overall, I suppose, banded objectives from there and understanding what the benefits of the project would be to us and to the other partners as well and use that to help frame some of those outcomes and what we're going to see from the project.

From that then, still keeping in that core team, and we found that core team is helpful just to establish things right at the start before we develop things and open things a little bit wider, is to look at then developing, what we've called, a bit of a high level strong man. So have a think about work programmes, work packages and really turning it from an idea, let's say, a piece of technology, whatever it could be, into an actual fundable project and trial as well. So understanding what steps we'll need to go through to make this a success and defining the overall scope and what we want to see from that.

It's at that point then where we start to understand, actually what roles and skills do we need to form as a collective partnership to help deliver what we've started to develop here is a bit of a scope. So actually, we might be thinking we need someone with a much strong engagement, communications type approach and we might be looking for partners that have that skill set. Some that might have different reaches into different sectors, someone that's got expertise in a particular technology. So that's when we start to then think collectively as a core team, a little bit around who else we could bring into this? How else do we find these people? Do we go out to tender procurement for certain aspects of it? But really, that's when we expand out that partnership then and really start to nail it down and look at others that can be involved in there.

From that then, when we've got a bit of a larger group it's taking strong man project and really refining it down, understanding what all of those partners hope to get out of it? What learning they can bring into this, how we can adapt what we've already got, and really coming up with much stronger outcomes and deliverables from some of these projects that we're delivering. Then finally, it's that next stage, and these last two are really where the time is spent really and a lot of the hard work is done. It's developing a much more robust programme, then thinking of timings, thinking about trial dates, thinking about how and where we're going to deliver some of these things, and having really proper grown up conversations in a way.

Thinking about who's going to own what parts of this project, who can contribute as well? If there's contributions required in there and that's coming from who benefits most from this project and who should be contributing to that as well. Then that's

really when that true mobilisation starts. So all of this happening before we're even looking at bidding in or funding. Can you just move on to the final slide, thanks Sophie.

Just a few final bits really, picking up on some of those challenges that I think Charlotte alluded to, and from our learning really mobilisation, we realise, takes a lot of time. Some of our projects we're still trying to get through collaboration agreements where we've got 25/30 partners in there. It's taken almost a year to get to stages of this. So we're really, really learning fast on some of this and we're realising before any big submissions are made, provide early sight of any required terms and conditions coming winners' agreements. We hold actually on boarding processes now with some of our partners so that they can ask questions for us.

We've also coordinated, as a water sector, with the legal heads a draft collaboration agreement, which we're learning from all of those that we've signed today to understand what the different sectors are looking for slightly differently. How does liability sit? All of this great learning and we're pulling together a bit of a draft that we're hoping to utilise going forwards and can be used really on any innovation project.

IPR was another one. Obviously my head is there on the Ofwat Innovation Fund thinking through obviously this IPR type of aspects, less so, for the Water Discovery Challenge. But when we're thinking about that we've sought to develop an IPR asset in this register and develop a bit of a process around this. So we can understand what IPR people are bringing to the table. Who owns this, how it's going to be used and then manage the process about when IPR is created and who owns that? So is the joint ownership within some of those, who spends the most amount of time on it? Do they own it and working that through and getting that agreed upfront so that it doesn't cause any arguments into the future.

Finally as well, we're seeing stakeholder management is easily a full-time role. Our project managers have been trying to deliver the projects, but also actually we're realising a big part of that to play is managing and listening to the partners. So actually when we're developing projects and developing some of those it's best to start thinking, as we've started to do now, around who are your active partners, as we've called them. Who are supporting partners? So who are those that are actively delivering, might be getting funding? Who are going to be working forwards and actually delivering on the ground some of this sort of stuff? Who are partners that actually might be a bit more interested in the overall outcomes of the project? Who are those that want to share the learning? Actually we can have a bit more of a weekly core group in terms of those active partners.

The support partners are more interested then in monthly updates on what's coming out of the projects to help reduce some of that stakeholder management. Also just bringing all of the partners together, obviously builds trust in there and that actually each partner is delivering a specific element of it. But actually it's that understand that there's a collaborative objective behind all of this working. So whilst we're all delivering our own little bit, there's that joint effort that we're all working towards. I think that was my final slide, thanks Sophie.

AG: Okay, thank you for that Phil. Some really great insight there from your programme. A reminder that those on the call if you want to submit your questions, not your Q&As because we've got the answers hopefully, do so on Slido here. Okay, if I can bring all of the presenters back on and Caecilie. We've had quite a few questions come in already and possibly they've been answered already. But we will run through them.

CHP: Just a quick note just to say that the audience is very, very busy on Slido. So I just wanted to fly to the audience that we will try and group the questions a little bit because we'll try and address as many of them as we can. So, as we go through the Q&A we'll try and group them together a little bit so we can address them in bulk. Because otherwise we might not get through all of them. So if one of your questions is not being answered in the right order, this is the reason, and obviously if there's anything unanswered at the end of the Webinar email us all of your questions and we will address them directly with you. Arlene, I'll hand back over to you.

AG: Thanks for that Caecilie. Okay great. So we've got a few questions here around finding partners and you've all got a lot of experience in that field. So very simply, how do I best find partners for my solution? Perhaps if we can elaborate a little bit on whether there's a central resource where someone new to the industry can identify some of those potential collaborators. If you don't mind, I'm going to start with you Charlotte. If you can talk through broadly how someone might find a good partner and then Phil if you could perhaps come in then on how you approach this from Anglian Water.

CT: Yes, so I think it comes back to again that purpose. Why are you looking to partner and understanding who it would therefore be best for you to partner with. I think there's the broader piece of making sure that you are partner ready and having those connections for these potential projects to realise that purpose. So attending events, conferences, etc., is a good way to do that.

But there's also the piece about how you could proactively reach out like through LinkedIn or through networks where you've got a clear ask for a partners and they can help bridge those introductions and connections. I also use some various platforms, things like Traktion, PitchBook, Beauhurst to help me find certain innovative organisations I want to partner with. They do have a cost to them, but things like Crunchbase they have a premium model, so you can also do searching on there for other innovative organisations that might be on your field. So you can do secondary desktop research to complement in person networking and connection opportunities. Fantastic, thanks Charlotte. Phil, I wonder if you could just build on that for the water sector.

PJ: Yes, absolutely. So I think just reiterating what Charlotte was saying on some of that. There's opportunities to look at as well through things like Spring. They've got a few resources in there and links to different, I suppose, groups, communities and knowledge and things like that where you might be able to share and understand what others are up to through there.

I think how we've approached it as well is I think we're fortunate we've got an approach called Win, where suppliers can come to us and share those ideas. Then how we go about doing it really is just understanding who else might be active in that area. So it's a bit, in a way, a [unclear 00:39:05] review to see what's out there, who's quite a big player in some of these areas, who might've done stuff before and just start conversations with them. Find a contact in there, see if it's something they're interested in working with.

In my time in local authorities I used to just have a look in terms of the landscape as well, what strategies are out there if it's quite a regional type approach. Who is quite active in some of these areas and who's looking at them? So look at local strategies, local emerging policies and things like that and just see if you can just identify through that searching mechanism as well.

AG: Okay great. That's great and actually that brings me on to a little bit more of a build of a question which is similar to that, but it's actually more about that local stroke, regional versus national or wider. So who would be best to explore as a partner if a solution is much broader than a local one? How do you go about finding an approach for a potentially national project? I'm going to start, Tom, with you, on the basis that the flood and coastal programme is national, of course, and then I'll probably bring Phil in again, if that's alright.

TR: Yes, sure Arlene. So it's driven primarily by the problem that you're trying to solve, I suppose. What is the primary driver for the work that you're doing? If it is the benefits communities to customers, then those local partnerships are going to be absolutely fundamental to that. But if you're trying to influence change, more broadly, then there's a role for that national partnership organisations and getting them involved. So it's always a question of scale. I would say in the absence of knowing specifics, both is probably a good start. I mention in my bet, you need both edges, both bits of the candle, for it to work. So you can't undermine those local organisations.

I suppose that's probably a bit of reflection is that those local partnerships should always take precedent over anything national. The reason for that is it's because if that doesn't work then it doesn't matter how those national partnerships work and have agreed to something. Because if it's not practical on the ground, then you're not actually going to see the change in the outcome that you're after.

So if you're going to put priority to one, I would say local is where the value is. But if your whole purpose is to influence change and see that, then you do need to do that national, so it should all be linked into what your overall project is after.

AG: Thanks Tom, and Phil I know that Anglian Water are involved with several national level projects that have come through the funding on others, so I'm just wondering if you've got anything that you can add to that.

PJ: Yes, I think what Tom's point there was really good in terms of actually you might be thinking of it, it's got a wider application to it. But actually a local pilot, a local test will go a long way really. I think obviously what we're finding is the national scale,

the much wider ones, they are of quite a bit of a higher magnitude in terms of that delivery. Because you're trying to do that major change that can take a long time as well when you're looking at policy change, when you're looking at any other change in there from a national perspective. It's of an order.

So I suppose it's whether you're looking at that scale of things, whether you are wanting to opt for that change or actually are we just there for we want to just start to kick start this. We want to get it out there. We want to look at that local piece so we can get some of that information back. We can build that learning up and then we can utilise that for maybe a bigger project a little bit later down the line, when we've on boarded a few more people and when people have started to understand a little bit more around that.

So yes, I think the local scale as well we've definitely found more manageable in a way that actually you've got potentially smaller groups in there that are more active as well and more driven, I suppose, in their localities to deliver on, rather than potentially being subsumed by the larger national voices that are out there.

AG: Okay great, thanks Phil. I'm going to move on a little bit, a slight change of theme here and Charlotte, if you don't mind, I'm going to start with you and then maybe Caecilie if I could bring you in as well. So I'm going to combine a couple of questions here and that is around what's the impact on equity and IP if you partner or collaborate. Charlotte, if you don't mind giving us your experience, but Caecilie I'm wondering if you can come in with what the rules for this competition is in terms of IP. So I'll start with you Charlotte.

CT: Yes, so from an equity position, I would only anticipate that was because it was an investment into the business to progress your own development of your solution or the progression of your company roadmap. That investment could come from a corporate organisation. It could come from a dedicated venture capital or Angel Investment Fund. That is when I would anticipate equity would be provided in exchange for some services or finance. I would not anticipate it as part of any form of public innovation funding project and that should never be on the table.

Then in terms of the IP piece and how to share that amongst partners, it depends on what you agree with your partner. Generally all background IP is owned by the individual organisation and any foreground IP that might be developed is a result of the project, would be determined between the partners as to what that would look like. It is usually shared between all partners with the ability to exploit by all partners as part of any future development. But again, that would have to be agreed with your individual collaboration project partners.

AG: Okay, thanks for that. Caecilie, I wonder if you can maybe come in on what for this competition for Discovery Challenge, what's the IP arrangements?

CHP: Yes, no absolutely. So there's actually no IP on water discovery. So whatever you develop, whatever you own, whatever you develop throughout the course of the competition, it stays with the entrant. Discover is focused on quite early stage

innovators and first early stage solutions and approaches and ways of working. So we're not necessarily only looking for a product or a solution to a problem, but also approaches and ways of working and tools to some of that. But there's no IP. So when you enter, whatever you have and whatever you develop stays with you.

AG: Fantastic and while you're there, another question about, does the innovation or the solution that comes through the competition need to result in a commercial product?

CHP: So no. So on the website as well Elektra maybe you can pop it into the chat. You have to fit within the innovation themes of the Ofwat Innovation Fund and then we're particularly looking for things across that can generate impact across the sector. That doesn't need to be a commercial product. Again, it could be an approach to how you're doing things, ways of working. It could also be a solution to a product, a solution to problem or an actual product. But it's absolutely not a necessity that it has to be that. Then you'll work on that development throughout the course of the challenge. If you're successful, you'll work with the water sector and mentors from the sector very closely on the development to ensure that there is the biggest impact across the sector as possible.

AG: That's great, thank you very much. There's a really interesting question here and I'll probably bring in Tom and then I'll try and approach a little bit as well. That is about we're talking about the importance of partnerships, but how many is too many partners? Is there such a thing as too many partners? What have you seen in the Flood and Coastal Resilience Programme? Because I know some of your projects there's a lot of partners there. So have you seen any trends coming out around some of the successes there? It'll be interesting to pull that through.

TR: Yes, absolutely Arlene. So Phil touched on this as well in his presentation. So I don't think I've seen an upper ceiling of number of partners. But what needs to be recognised is that it requires resource to manage partnerships and as the number of partners increases then the resource implications of coordinating, making sure those partners are cited, engaged on actions, that needs to be recognised. So you can't just invite hundreds of partners to the table and expect that they will coordinate themselves. It just doesn't happen and I have seen projects where that hasn't happened and effective progress just staff whilst there's no coordination.

So if you do have the ambition for lots of partners, great. I genuinely don't think there is a ceiling on that and we just need to recognise that it will require a resource and time to coordinate that. Then admittedly there's also the distinction between, as Phil mentioned, those active partners and stakeholders. So maybe a continuing exercise of mapping out of your partners that you've got involved, which are the ones that are highest impact and some of the change makers and maybe adjusting your partnership strategy and approach to reflect that. It shouldn't just be set at outset, it should be something that should always be revisited. Yes, I hope that helps.

AG: Thanks Tom and there's lots of head nodding there, Phil. So you've obviously experienced it and got the scars on your back.

PJ: Yes.

AG: So if there's anything that you want to add to that just feel free.

PJ: No, I think Tom picked up on exactly those points I made, which was great, just defining roles. Roles and responsibilities upfront and differentiating really. But make sure you resource it properly if you are looking for large partnerships, you will need additional support to help manage them all.

AG: Yes, It's something that's quite important. More doesn't necessarily mean better. You can have a lot of the same types of partners on board or you can have a very broad and diverse group. So it's going to be interesting to see how some of those different partnership profiles pan out through the Innovation Fund and also through FCIP. So thanks for that everyone. So Caecilie, one for you. Is there any help for micro companies with commercialisation of products and services developed resulting from discovery?

CHP: Yes, I'll jump on that one. So yes there is. So obviously in terms of getting the product or the solution ready for commercialisation, that one of the things that we would work really closely with the micro company or the innovators throughout the support phases. So if you are successful, we start with a bit of a six month support where you'd work with your mentor, provided with expert support in developing your solution and getting ready, getting it ready to the hands of the maturity framework and getting it ready for potential launch or viability testing. Then if you're successful in winner the challenge, you would then continue for another seven months with the water sector and your mentor on the development of that.

Then just in terms of when you finish there are multiple avenues out of discovery. So you would've worked for 12 months plus, very closely with the water sector across England and Wales, with your dedicated step to mentor. You would really have massively expanded the network that you might hold across the sector. So there would be quite a lot of opportunities for you to either partner with a water company for immediate adoption or further testing. But the conclusion of the discovery challenge also links quite nicely into the breakthrough challenge which also sits with the Ofwat Innovation Fund. Which can take your solution much further on, but it requires a formal partnership with a water company. So if you are at a stage where you'd need further development or you'd need to partner to accelerate your solution, there would be an opportunity to then explore partnerships with someone in the water sector and then enter the breakthrough challenge potentially after you've finished the discover. Yes.

AG: Thanks Caecilie. Actually if we continue with that. You mentioned there about partnering with water companies. We have got a question in here that's about can entrants partner with Scottish Water. I think the comment here is around can they host the project if the application is successful with no other involvement of England and Wales water companies? So it'll be good to get your views on that.

CHP: Yes, they can. So if you go to the website, I don't have the link but Elektra again you have the link handy for the chat. So you cannot partner with a registered water or water and waste water company across England and Wales. There's a formal list that lists all of those water companies which Elektra will pop into the link. You can be working with Scottish Water, you can also be working with what's classified as NA, which is a newly appointed supplier and that won't make you ineligible for the competition. But it's worth mentioning that you don't need to be in a partnership to enter Discovery. You can only enter as one company. So if you're already an incorporated entity in the UK you just enter and then if you're working with Scottish Water outside of that, that's in the hands of you. But we don't ask you to list that in your entry. It just has to be one organisation, that organisation is entering, and then how they divide the work amongst themselves and potential partners is up to them. But you cannot be in a formal partnership with a water company in England and Wales.

AG: Okay, thank you very much. Thanks for that Caecilie. So I'm just going to move slightly on there. There's a question here, be interested to know how the panellists see the role of academic partners. I'm not sure whether that's seeing the role within the competition or seeing the role within partnerships more broadly. I think maybe if we answer it more broadly and maybe we can then follow up and maybe Caecilie we can think about what it means in the competition. Charlotte, I wondered if I can start with you and your experience and how you see with some of those broader projects that ARUP does, not just in water sector what the role of the academic partners are.

CT: Yes, I think it depends on where in the journey the innovation is being developed, but also the breadth of services that sit within universities when we think that they already manage their own large campuses, managing water and waste water themselves. So there's an operational piece as much as there is research. But I think the way that I've partnered with academic partners on water projects previously has been where they might have existing intellectual property that could support the development of the solution, so we can just calibrate in that development. Where they might have carried out research into the field more into the sector, and that includes engaging with the business schools and market research. Then also that pilot phase when getting that third party verification and testing of outputs and putting in really good testing procedures in place.

So I think, yes, multiple departments and opportunities to engage with academic partners.

AG: Okay, that's fantastic. Maybe Phil, would you be able to build on that, based on your experience of academic partners within the projects and initiatives that you develop.

PJ: Yes absolutely. I think Charlotte expertly covered everything that I couldn't have said really to be honest. But covering all of those points is what we've been looking for. We personally have seen them essentially in the delivery of some of the Ofwat Innovation Fund projects. So we've been working with the likes of Cranfield, UEA, Manchester and others. Some of them coming from, as you were saying, looking at some of the technologies we're using, helping us do some of the reviews of those,

previous research that we've been doing that we can feed into some of our projects. Also even as much as hosting PhD opportunities as well through the projects and looking at how we can join up closer. So we've been working really closely with a broad range and we'd continue to do that.

AG: Right Tom, would you be able to pick up on that?

TR: Yes. I mean massively valuable. I think certainly from the Innovation Programmes, Flood and Coastal stuff, the knowledge and expertise surrounds monitoring and evaluation it's just phenomenal and that for me represents one of the step changes. Your recommendations are only as good as the evidence that you generate and the confidence that you have in that evidence. Academic partners have a real pedigree on that kind of knowledge and expertise about what works, what you should be collecting, how you should be collecting it, etc. So it's of huge value.

AG: Thank you, Tom. Caecilie, you've got your hand up.

CHP: Yes sorry. I just wanted to jump in as well because I thought it's quite interesting from a discovery perspective. That obviously for Discovery, if you are from an academic institution or research institution, that this is actually a chance for you if you have an idea, if you're working on a solution or something that would benefit the water sector across England and Wales. This is an opportunity for you to just enter the challenge directly. If your institution is incorporated Companies House or Royal Charter that makes your organisation eligible for Discovery. Then throughout Discovery you would then be provided with the partners in the water sector, so it's the other way around. So we would work directly with you, but there would be lots of support and mentorships available directly from the water sector. So that partnership would be facilitated very closely throughout the duration of Discovery. So just wanted to put my hand up and say that you would be eligible if you are coming from an academic institution.

AG: That's great, thanks for that. So we've got someone in the audience who's interested in hearing whether anyone sees a role to draw on the vast breadth and depth of experience and expertise in the Rivers Trust Movement. So I'm going to go with Phil here and Tom. So Phil if you could go first on whether you've got any projects or any view on that.

PJ: Yes. So, I suppose I'm not sure exactly in terms of Rivers Trust Movement. But we've obviously been doing a lot, I suppose, to Rivers Trust and through especially Project Castco as well that they're leading on. That was funded in the first round of the Ofwat Innovation Fund. So, we've been doing a lot of work, I suppose, with them through some of those projects collectively as water companies and collective as others to look at catchment monitoring type working as well. I know they're very, obviously, strong partnerships within there and they're actively looking at supporting as well works that we're also trying to support. So yes, definitely looking at opportunities to learn and go on with the movement that they're working on, absolutely.

AG: Thank you. Tom, have you got any views on that from your perspective?

TR: Yes, so a couple of areas with the Rivers Trust. There's distinction here between the National Rivers Trust, who do a lot of that policy influencing, general enablement and then the local Rivers Trusts. So local Rivers Trusts, they are there, they have these amazing relationships. They've got a fantastic amount of knowledge and experience about what works within particular catchments or what the barriers and challenges are and often that knowledge is not duplicated anywhere else. So there really is a USP that your Rivers Trust will bring to the table. Just thinking back historically to an old LFM programme I did, that we wouldn't have been able to engage half of the number of landowners that we did without working really closely with, it was then, the Little Don Rivers Trust just outside of Manchester. Some of those relationships with landholders, farmers, land agents, it's invaluable. So I really recognise that.

AG: Thank you for that and perfect timing. We've answered the questions that have been posed. I want to give a great thank you to Charlotte, Tom, Phil and to John, Caecilie for great hosting and to everyone online who has been engaged and has posted some really interesting questions for everyone. I'm going to close the Webinar now, there is another one on Thursday. Do sign up for that, I think it's on the website. Maybe we can pop the link in the chat. So thanks again everyone and goodbye.