



'Enabling Innovation' workshops

In 2020, all 19 water companies worked together to develop and publish the Water Sector Innovation Strategy. This outlined the sector's vision for innovation, the collaborative principles behind it and the themes guiding where effort should be focused.

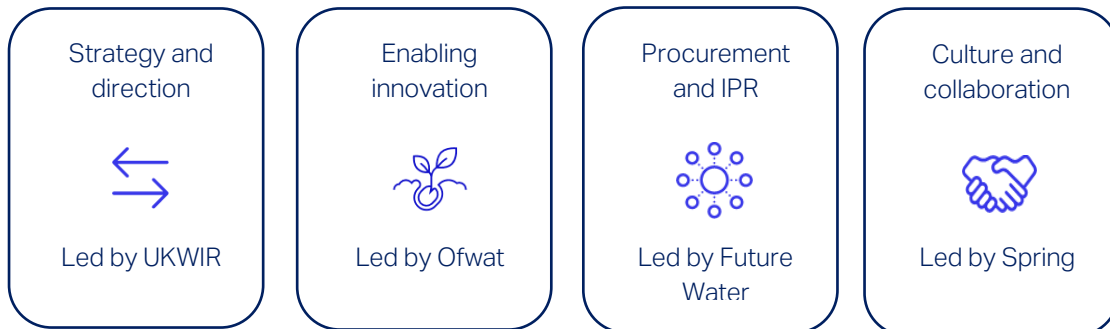
The strategy recognised the complex, interconnected – but fragmented – innovation ecosystem in the sector, and highlighted an opportunity for greater coordination, collaboration and cooperation. A centre of excellence.

Spring is the sector's centre of excellence. It launched in December 2021 as an innovation accelerator, driving collaboration across the sector – bringing water companies together with innovators of all shapes and sizes to solve big challenges and support the sector deliver the game-changing innovation required.

Spring doesn't replace the work companies do on their own innovation projects, nor does it replace other enabling activity such as Ofwat's innovation competitions. It complements these, enabling greater collaboration between the supply chain and water companies to support achieving its long-term ambitions.

During the October 2021 Northumbrian Water Innovation Festival, Spring organised four workshops – each chaired by different partners – to inform the final stages of Spring's MVP development and its first full iteration.

The workshops were:



The following pages include a snapshot of each workshop, including the types of organisations that attended, the challenge statement and key topics of discussion.

The primary goal of the workshops was to generate actionable insight for the industry to take its next steps towards solving these challenges. The workshops will also help shape our MVP, as we will use these discussions to inform our evolution to our first full iteration in Spring 2022 – in collaboration with our partners.





Workshop 1: Strategy and direction, led by UKWIR

This workshop sought to address the challenge statement:

How do we achieve a shared vision to drive innovation in the water sector – resulting in stakeholder alignment and clear short medium- and long-term goals?

In addition to three UKWIR facilitators, there were participants from:

- Economic Regulators
- Contractors and consultancies
- Research organisations
- Water companies
- Academia
- Trade press

Format and structure of the workshop

The workshop was run as a virtual meeting, with participants split into two breakout groups then feeding back to the main group. UKWIR facilitated each group and captured the outputs.

Breakout session one – exploring the key issues

- Discuss the issues
- Review their importance
- Identify up to four priorities

Breakout session two – prioritise and identify key solutions and actions

- Identify a “Big Idea” to address each of the priority issues identified in session one
- Who needs to be involved in its implementation?
- How long will it take to implement?
- What is the first step?
- Who would be best placed to lead on this?

Summary of feedback and next steps

The problem has existed for years and cannot be solved swiftly. It needs a shared vision supported by strategic leadership and overarching political support for the sector.

The water sector needs a “joined-up voice” to make its case in Westminster and explain its problems and challenges. Participants agreed “we need someone high up in Government that’s got water more prominently in their portfolio”.

Scotland’s Hydro-Nation was suggested as a positive example that could be adopted in England to address some of the political, narrative and leadership challenges identified.

The sector might need to be more “radical” to address the increasing pace of challenges. Spring could be a vehicle to start addressing some of the challenges identified.

A roadmap focusing on the changes that will bring the greatest impact – including the actions from the Water Innovation Strategy and Ofwat’s priorities would be valuable. UKWIR agreed to coordinate and lead on a follow-up meeting to take some of these actions forward, including making the case to Government.



Workshop 2: Enabling innovation, led by Ofwat

This workshop sought to address the challenge statement:

Can finance and regulation play a role in widening opportunities for innovation? How is this sustained beyond the five-year funding cycle? What can we learn from other sectors?

Participants at the workshop were a mixture of Regulatory and Finance Directors from water companies as well as representatives from:

- The Drinking Water Inspectorate
- OFGEM
- UKRI and Innovate UK
- Arup

Workshop discussion

The workshop discussion focussed on what works well and what financial and regulatory opportunities exist to improve innovation.

Examples of what works well include:

- Existing strong partnerships across the sector – including with academia and partners outside of the sector
- A developing collaborative attitude across the sector
- Breadth of ideas and interest in water innovation funds
- Public support and sector momentum for innovation

Participants voted to prioritise the main financial and regulatory opportunities. The three most popular under each category are:

Financial Opportunities	Regulatory Opportunities
Co-ordination and collaboration – 8	Taking a longer-term view – 9
Supporting commercialisation – 7	Greater regulatory alignment – 9
Financial models – 3	Increasing access to / creating pride in the sector – 5

Three specific opportunities were developed further: Alignment and longer-term strategies. Co-ordination and collaboration and Cost / benefits and risk sharing. Some key points are below:

Alignment and longer-term strategies

Longer-term

- There's an opportunity to better enable value across multiple AMPs as the five-year horizon can be prohibitive of longer-term change and impact
- Should there be two simultaneous price reviews? A short-term five-year period complemented by one taking a ten-year view?

Alignment

- Regulators could be more joined-up about shared goals – including linking innovation themes to government’s priorities for the sector
- A cross-sector rather than single-sector framework could unlock more funding and better innovations
- There’s an opportunity to take City plans and innovation needs into account, rather than just national policies and frameworks

Co-ordination and collaboration

Who can the sector build better relationships with?

- Energy – including an opportunity for a joint Ofwat / Ofgem fund
- Local government
- Developers

Co-ordination and collaboration

- There’s a need for “speed dating” between supply chain and water companies to broker relationships
- The innovation fund could allow companies to form consortiums which should encourage more cross-sector partnerships

Cost/ benefits and risk sharing

Cost and benefit sharing

- Cost sharing allows companies to share from innovation
- How can this be used to encourage investment in innovation in the short-term?
- Sharing costs can reduce the initial, bigger innovation costs

Risk sharing

- Better shared testing can reduce risk from failure and reduce costs for innovators
- Sharing failures and learning can avoid the “race to second” – and increase shared knowledge across the sector

Overall, greater cost / benefit risk sharing could encourage greater collaboration on key topics such as meeting the needs of vulnerable customers.



Workshop 3: Procurement and IPR, led by Future Water

This workshop was chaired by Paul Horton, CEO of the Future Water Association addressing the challenge statement:

"How do we develop an IP and Procurement framework that supports new ideas, new companies and new technology coming into the water sector?"

Organisations represented included:

- Ofwat and the Environment Agency
- Water companies
- Innovate UK
- Members of the water sector supply chain
- Patent specialists from outside the sector
- Representatives from other sectors (such as rail, IT)

Main points from the workshop

The workshop began with a clear overview of IP and patents and their importance to innovators and water companies. Clarivate data shows the UK lagging behind international competitors when applying for new patents.

Subsequent discussion focussed on how the water sector could incentivise its supply chain to innovate and what barriers or challenges there are to this. Participants identified drivers for innovation and challenges to it – followed by a discussion of some emerging themes.

Drivers for innovation	Challenges to innovation
Smart technology	Collaboration
Net zero goals	R&D in the sector compared to global initiatives
Support from regulators, sharing data and procurement practices	Risk averse culture
Skills and workforce	Timescales for implementing physical solutions compared to data-led solutions
Customer expectations	Asset age conflicting with AMP cycles

Emerging themes

Some of the themes emerging from the discussions on drivers and challenges included:

- The sector needs to understand where it needs to innovate the most
- Stronger focus on collaborating with academia to generate new knowledge and look for opportunities to commercialise it. This will increase support from the supply-chain and encourage more Universities to become involved
- The industry needs to take an end-to-end approach to value



Workshop 4: Culture and collaboration, led by Spring

This workshop was chaired by Carly Perry, Consultant Executive Lead, and Shaunna Berendsen, Client Programme Director, from Spring. The challenge statement was:

"How do we leverage the benefits of successful collaboration to accelerate outcomes within the water sector?"

Organisations represented include:

- Water companies from England, Scotland and Wales
- Water sector supply chain
- Academia
- Ofwat
- Fintech

Format and structure of the workshop

Participants discussed what "culture and collaboration" mean to them. Key features included:

- A culture where all stakeholders are treated equally
- Communication is honest and is focussed on transparency and building trust
- Culture and collaboration are interlinked – they can exist separately, but one can foster the other

Participants voted on the components of a successful collaboration framework – the most important elements by vote share were: trust (7), culture (6), and structure, principles, approach and aligned problems (4 each).

The next exercise asked participants to identify what is currently working well and what needs to improve. Some of the




<u>What's going well?</u>	<u>What needs to improve?</u>
Aligned problems / commitment to common goals	Increased awareness outside of the sector of innovation work
The innovation strategy	Lack of long-term coherent vision
Initiatives to bring other sectors in	Greater appetite for risk in procurement
Transparency into Ofwat's innovation fund	More data sharing
Increased collaboration between academia and industry	Increased diversity across the sector
	More focus on upskilling company teams

From this, participants chose issues to discuss solutions for under the headings of trust, alignment and culture. The issues chosen were:

- Better communication of challenges
- Including better communications within the tier structure
- Data sharing
- Living sector culture and calling out bad behaviours
- Including promoting inclusivity and helping to fast-track procurement
- Recognition of the problem

Solutions were identified with the first steps needed, key stakeholders and the benefits that solution would bring.

Examples include:

	Actively promote innovation outside of the water industry	Who is needed? Tech publications such as Techcrunch industry	Benefits: Easier for those outside the sector to get involved
	Commit to the idea of OpenData and start opening up APIs	Who is needed? Water companies in partnership with tech companies	Benefits: Opportunities for deeper insights and giving start-ups access to new data
	Spring to emphasise the needs the sector has already identified	Who is needed? Spring – in collaboration with water companies to better articulate the	Benefits: Innovators are able to focus their efforts on developing needed solutions

These workshops were an important step in understanding where Spring should focus our efforts. Reflecting our users' needs and priorities in our MVP and future iterations will ensure we can meet the challenges and make the most of the opportunities ahead of us.

We are grateful to Northumbrian Water for hosting us at their Innovation Festival, for Ofwat, Future Water Association and UKWIR for facilitating workshops and for everyone who took part.