

# The Water Innovation Strategy Ecosystem Guide

A tool for navigating the ecosystem that supports innovation in the UK and Ireland water sector.



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# Introduction & context

# What is the "ecosystem guide" and where has it come from?

In 2020, the UK and Ireland water sector came together to define a vision and strategy for driving transformational change through collaborative innovation. At its core, the <u>Water Innovation</u>

Strategy 2050 was (and still is) a call to action; an invitation to new and existing partners to work with the sector to solve our pressing challenges.

Created for and with the sector, the original strategy articulated the "how" and the "what" of sector innovation, outlining both the cross-cutting changes that were required to inform and guide innovation activity and the themes, or topics, that we should focus our innovation efforts on. An extract from the strategy's executive summary explains this perfectly:

"In the strategy, we set out how we will start to deliver transformative innovation through our key principles which define how we will work together. This will enable shared access to skills, resources, knowledge, data, and support us in creating a collaborative innovation culture.

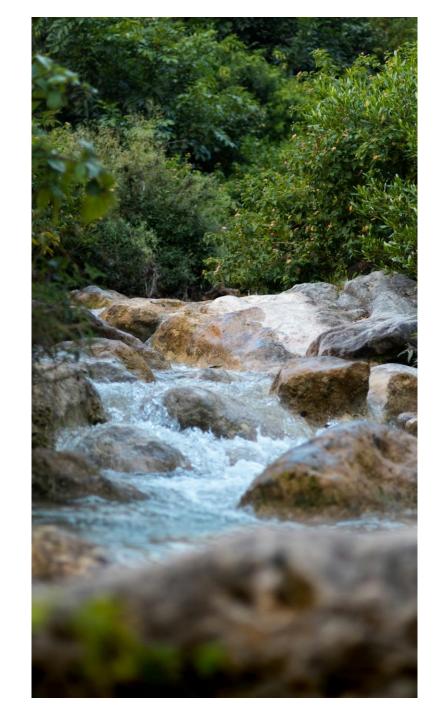
Our strategy also defines the ends; a number of key themes, which describe our environmental, social and economic ambitions, which we know are important to our customers. For each theme, we have set ambitions that the sector will aspire to, and work towards, in the short, medium and long term, to 2050."

However, the strategy was never intended to be a static document. With its publication, the sector committed to "continuing to develop our collective understanding over time, [and making] it easier for people to collaborate with, and innovate within, the water sector."

Spring, the UK and Ireland water sector's innovation centre of excellence and custodian of the Water Innovation Strategy, has been working with the sector to do just this. Throughout our engagement, we've seen how the sector's approach to innovation has evolved, even as its core ambitions remain the same.

The Water Innovation Strategy Ecosystem Guide responds to this evolution. It is intended to provide a clearer, more connected view of sector innovation: who's involved, what roles they play, and how ideas move from early research to real-world adoption.

This guide has been created to help innovators, both inside the sector and beyond, to better understand and navigate the complex water innovation ecosystem. At its core, this supplementary document is a tool for connection; it highlights key avenues for collaboration, identifies the types of support available to innovators, and encourages a more coordinated, inclusive sector.





### Using and contributing to the Water Innovation Strategy Ecosystem Guide.

#### Framing the ecosystem around its functions

Innovation, both in and beyond the water sector, is a complex process that rarely follows a straight line. The original strategy recognised this, setting out seven key themes and desired outcomes within them, but not prescribing how to get there.

This guide mirrors that approach; categorising the vibrant water sector innovation ecosystem by what we are calling "functions".

Functions group together similar types of support that innovators can tap into on their journey from idea to adoption but aren't a prescribed path for how to bring a solution to market. Framing it in this way helps to demystify our complex, historically opaque sector and helps innovators identify and access the great support that is out there.

Through extended engagement with the sector, we have identified six core functions: research & development, funding & investment, testing, implementation & adoption support, regulatory support and oversight, and communication, collaboration & networking. Each function has its own section in this guide, detailing:

- What the function does
- · When you might engage with it
- Tips for getting the most value

Our functions aren't fixed, and we expect them to grow and evolve as the sector does.

#### How to use this document

The Water Innovation Strategy Ecosystem Guide is a practical tool for understanding and navigating the innovation ecosystem in the UK and Ireland water sector. It has been created to help innovators find, understand and access the support that is available to them.

The guide has two parts: this guide and a Living Database.

This guide gives a high-level view of the ecosystem, shows how the functions interact, and offers tips on when and how to engage.

The Living Database is the up-to-date record behind the guide. New organisations and new types of support are added as they emerge, keeping the picture current as the ecosystem evolves.

To get the most out of the guide, you should:

- Scan the overview to locate where you are in the journey page 6.
- Open the relevant function page for what it does, typical outputs, and when to engage
- Use the Living Database to find organisations and contacts.
- Remember to revisit as needed: the database is continuously updated.

#### How to contribute to the Living Database

The Living Database is the primary way to find support across the ecosystem. However, it only stays useful only if entries are up to date.

If your organisation isn't listed, or your work has changed, submit an update.

Identify the function(s) you contribute to and provide the essentials below:

- The name of your organisation
- Your areas of focus / the barriers you help overcome
- How to get involved
- Type / sector
- What you do
- Your website

Visit <u>the Living Database</u> to see if your organisation is included. <u>Use the submission form</u> to add your organisation.

This Living Database is here to help you explore what support exists across the UK water innovation ecosystem.

Whether you're just starting out or looking to deepen your involvement, it's a place to discover sector functions, find where your work fits, and connect with others working toward similar goals.

We'll review each entry for clarity, tag it to the right function, and include it in future updates so the guide keeps growing with the sector.



### How does this fit in with other water sector strategy documents?

# What is the relationship between the Ecosystem Guide and the Water Innovation Strategy?

The ecosystem guide is a companion to the original Water Innovation Strategy. It has been created to help innovators both within the sector and beyond to better understand and navigate the complex landscape of water innovation.

At its core, this guide is a tool for connection. It maps out how the ecosystem operates, clarifies the roles of different actors, and highlights key avenues for collaboration. By doing so, it supports more coordinated, inclusive innovation across the sector.

This is not a rewrite of strategic priorities or a prescriptive delivery plan. Instead, it's a navigational resource—designed to help all parts of the sector identify connections, reduce duplication, and accelerate progress. Our goal with this piece of work is to make it easier for new and existing innovators to engage meaningfully with the industry and each other.

# The Independent Water Commission and the National Water Strategy.

In July 2025, the Independent Water Commission published its final report a sector-wide review led by Sir James Cunliffe. Among its most significant recommendations was the creation of a long-term, government-led National Water Strategy (NWS) for England and Wales.

This Guide maps and explains the ecosystem of support for innovation (who does what; how to engage). The Independent Water Commission's recommended National Water Strategy sets national direction and priorities (long-term goals, planning architecture, regulatory shape). They are complementary, not overlapping.

- The National Water Strategy is focused on policy and planning (25-year horizon, ministerial priorities, regional system planning, clearer regulatory pathways).
- The Water Innovation Strategy Ecosystem
   Guide is operational (how innovators and
   utilities find the right support, at the right time,
   to move ideas into use).

The National Water Strategy will influence what gets prioritised and funded; the Guide helps practitioners execute; showing which functions and organisations to work with to deliver those priorities. The Living Database can also feed background truth to Strategy owners as the ecosystem evolves (what support exists, where gaps remain).

In short: strategy sets direction; this Guide helps the sector get there without duplicating strategy content.





# The ecosystem's functions

In this guide, we organise the ecosystem by its *functions* (categories of support available to innovators).

Each function groups organisations and activities with a similar role. The six functions we describe are: research & development; funding & investment; testing; implementation & adoption support; regulatory support & oversight; communication, collaboration & networking.

Use this section to identify the function that meets your needs, see typical outputs and when to engage, and follow links to relevant organisations in the Living Database. Move between functions as needed; the route is non-linear.





# An overview of our six core functions:

#### Research & development

Fundamental and applied research for the water sector. This function generates and shares validated knowledge, models, methods, datasets, and prototypes that provide a scientific evidence base and reduce technical uncertainty before further testing and development.

#### **Funding & investment**

Organisations in this function provide capital and incentives that enable innovators in the water sector to validate, scale, and deploy solutions, via grants and prizes, loans, equity, debt, and guarantees.

#### **Testing**

This function provides controlled and / or operational environments to trial solutions; running lab tests, pilots, and field trials to generate evidence of technical performance, reliability, safety, and cost ahead of wider deployment

# Implementation & adoption support

This function supports deployment and adoption of innovation in the water sector. Organisations here contribute in different ways, including sharing evidence on what exists and works, buyer supplier brokerage, pilot set-up, and procurement support.

### Regulatory support & oversight

This function ensures innovations meet legal and regulatory requirements by setting and updating requirements; issuing guidance; running approvals, permits and conformity assessment; monitoring and inspection; and enforcement.

# Communication, collaboration & networking

This function supports collaboration and shared understanding within and beyond the water sector. This includes media, thought leadership, communities of practice, events and directories to help partners find each other and align on problems and solutions.



# These functions interact with each other to form our innovation ecosystem.

The innovation ecosystem in the UK and Ireland water sector operates as a set of complementary functions, not a fixed process. Activity is rarely sequential: organisations enter at different points, engage different functions in parallel and loop back as evidence, risk and priorities evolve. The arrows in the diagram indicate influence and feedback, not mandatory steps.

In practice, interactions are cyclical. Evidence produced through trials can unlock funding decisions, refine procurement specifications or support approvals. Early regulatory input can shape accepted methods for testing. Initial deployments generate operational data that can reframe research questions and inform standards. Communication and convening keeps activity visible, aligns language and reduces duplication. Adoption work surfaces integration and change constraints that feed back into design and test plans.

When engaging with the ecosystem, the "correct" sequence varies by problem, risk, timing and capacity; momentum comes from finding the right path for the situation at hand, not following a fixed route.





# Research & development

# Sector innovation is supported by our world-class scientific community & research environment.

Research & development (R&D) generates the evidence that makes innovation possible. It spans fundamental and applied work, producing models, methods, datasets and prototypes that test feasibility and quantify benefits and risks.

Delivered by universities, research centres, testbeds and collaborative programmes, and others, R&D helps the sector understand systems and validate ideas so concepts can move from lab to trial and, ultimately, to deployment. Its outputs give utilities, regulators and innovators shared facts to plan with and a clearer view of where to invest next.

Typical outputs (think technical reports, datasets and prototypes) support investment cases, inform standards and regulation, and guide later-stage testing and adoption. Strong R&D also makes learning reusable: methods are documented, data is shared where possible, and results feed into pipelines, reducing duplication.

Innovation begins with R&D. It converts hypotheses into proof, and proof into potential solutions. The UK and Ireland have a strong base of universities, national programmes and testbeds that gives the sector an advantage in finding what's next. Start here: define the question, run experiments, share data, and scale what works.

#### Relationship with other functions

Research provides the evidence base that informs every other function. It guides testing by shaping hypotheses and methodologies, supports funding by identifying gaps and opportunities, and enables adoption by translating insights into usable tools. It helps regulators set standards and policy and gives communications credible content to share and amplify.

#### Some notable organisations in this function are:



#### **UK Water Industry Research (UKWIR)**

Champions collaborative research across water companies, regulators, academia, and others. With 1,000+ published R&D reports, they deliver trusted, evidence-based insights that inform strategic decisions and help the sector anticipate long-term challenges and opportunities.



#### **Cranfield University**

The Cranfield Water Science Institute delivers research for the UK and Ireland water sector across drinking- and wastewater treatment, sensors and analytics, catchments and reuse, and resource recovery. They host the UKCRIC National Research Facility and co-run the EPSRC WIRE CDT.



#### **CREWW**

The Centre for Resilience in Environment, Water and Waste is a joint venture between the University of Exeter and South West Water. Its £30m facility on Exeter's Streatham Campus supports applied projects such as leakage prediction, lead-pipe risk modelling and nature-based solutions.



#### Kings College London

King's Water Centre does interdisciplinary research for the UK and Ireland water sector in areas such as water governance, water quality, and risk. It works with sector partners to deliver decision-ready evidence and tools, including citizen-science monitoring and Earth-observation applications.



## Tips for engaging with research & development

There are many ways to engage with research & development: scan existing evidence, speak to experts, join a consortium, sponsor a feasibility study, or commission applied research yourself. The aim is simple: generate evidence that reduces uncertainty and informs your next move.

Use the tips below for guidance; the exact order and selection will vary by context.

#### Frame your problem and desired outcome

What specifically do you need to know to move your idea / technology / business forward?

- Problem statement, context and constraints (regulatory, operational, data, safety).
- Desired outcome and measurable success criteria; target TRL now → target TRL after the work.
- What is your time horizon and risk tolerance?

#### Specify the evidence you need

What questions must be answered to unlock the next decision? (e.g., performance, cost/benefit, integration constraints, failure modes).

• Prioritise your research questions; map each to a method and deliverable.

#### Choose the right engagement mode

Depending on your research question, the depth of your needs can vary significantly. Choose the right way to engage with the sector to get your answer in an efficient way.

• Light touch: literature review, expert clinic, method guidance.

- Feasibility: desk + benchtop work to size the opportunity and risks.
- Applied study: controlled experiments
- Testbed/rig: repeatable benchmarking and integration checks.

#### Pick the right partner(s)

Different partners provide different value. Choose according to your needs.

- Universities/research institutes: method depth, novel approaches, analysis.
- Accredited labs: recognised methods, benchmarking, reproducibility.
- Consortia/programmes: pooled expertise, shared costs, sector comparability.
- Specialist firms: speed, integration insight, delivery focus.

#### Set data, IP and publication terms early

Understanding and defining the intellectual property rights of any work you engage with, or commission, is imperative if you intend to commercialise it.

- Background vs foreground IP; data ownership and licences; publication/embargo.
- Access to raw data and code/models where feasible; confidentiality boundaries.

Getting the most from research & development

Define your problem clearly

1

Understand what evidence you need

Define how best to gather that evidence

3

Choose the right partner(s)

Understand who owns the IP

5



# Funding & investment

### The water sector benefits from both targeted and general innovation funding.

Funding & investment provides the capital and incentives to move innovation from concept to impact; financing the work needed to test, scale, and deploy solutions across the sector.

Organisations in this function employ a range of different funding instruments: discovery & feasibility grants, challenge funds, utility innovation budgets, outcome-based or procurement-linked funding, equity and venture investment, debt, and infrastructure finance. Each instrument has its own eligibility criteria, evidence expectations, time horizons and risk appetite.

Funders rarely back ideas alone. They expect detailed evidence: working prototypes or trial plans, credible benefits cases, delivery partners, risk and compliance plans, and a clear route to adoption (including procurement and operational fit). When well matched to a project's stage and risk, funding can significantly accelerate progress.

Ultimately, capital keeps innovation moving. With stage-appropriate investment aligned to operational needs and long-term goals, solutions scale faster, and risk is properly managed. This function helps determine which solution(s) are interesting, how quickly they progress and where the sector focuses resources.

#### Relationship with other functions

Funding unlocks progress by resourcing the work of other functions. It enables research, supports testing, and powers adoption at scale. It aligns with regulatory priorities to ensure responsible investment and relies on communications to promote opportunities and share impact.

#### Some notable organisations in this function are:



#### The Ofwat Innovation Fund

Ofwat has established a £600 million fund to grow the water sector's capacity to innovate, enabling it to better meet the evolving needs of customers, society and the environment. This takes the form of a series of competitions that water companies, that water companies and innovators can enter.



#### Innovate UK

Innovate UK's Net Zero Innovation Portfolio (Water) allocates grants of up to £10 million to accelerate decarbonisation and resource efficiency across the water value chain. It funds collaborative projects from pilot demonstrations to scale-up activities that can help the sector to achieve net-zero.



#### Isle Utilities: Trial Reservoirs

Isle Utilities' Trial Reservoirs provide a source of repayable grant funding to help the water sector adopt new methods and technologies. An independent not-for-profit with evergreen funds, it de-risks procurement and recycles repayments to fund further trials.



#### DEFRA

Defra's Flood & Coastal Resilience Innovation Programme (FLAIR) provides targeted grants to fund catchment-scale pilot schemes in partnership with water utilities. It supports testing of novel flood-protection and coastal resilience technologies.



## Tips for engaging with funding & investment

Funding can be accessed in different ways: discovery or feasibility grants, challenge funds, utility innovation budgets, outcome-based contracts, equity/venture and debt/infrastructure finance.

The aim is to match stage and risk to the right instrument. The tips below are guidance, not a process.

#### Define the objective and stage

Because there are many types of funding available, it is important to clearly define what progress your intended funding round will enable. For example:

- What TRL are you today? Where do you intend to be after this funding round?
- What are you desired outcomes and success criteria?
- How exactly are you going to spend the capital? On trials, technology development, capex, etc.?

#### Identify the right instrument and funder

To find the right funder for your objectives, there are several things to consider, for example:

- Eligibility (theme, geography, organisation type), timing and risk appetite.
- Match-funding or in-kind requirements.
- Procurement implications (can grant-funded trials become deployable contracts, for example?).

#### **Build the evidence pack**

Most funders don't back an idea alone. You will likely need to provide evidence as to your stage and progress before unlocking outside capital. Consider things like:

- Trial data or test plan; problem and use-cases, metrics.
- Benefits case (operational, compliance, financial).
- Delivery plan, timeline and acceptance criteria; reference sites or letters of support.

#### Set up your partnership

Depending on the funding route you choose, you may need to form a partnership or consortium to kick off your work.

- Lead applicant and delivery roles; utility sponsor and site(s).
- Governance and decision rights; data/IP terms; publication and knowledge-sharing plan.
- Conflicts of interest and due-diligence.

#### Investment terms

If your funding route involves debt or equity, it's vital to understand your investment terms in detail before agreeing to them.

- Use of proceeds; runway and key inflection points.
- Cap table and valuation expectations; security/convertible terms, covenants.
- · Investor rights and reporting.

Getting the most from funding & investment

Define your objectives and desired end-state

1

2 Identify the correct funding route for your needs

**Build your evidence pack** 

3

Choose the right partner(s)

Understand your funding / investment terms

5



# **Testing**

### The sector validates innovation through lab, testbed and live network testing.

Testing generates the evidence needed to move solutions from concept to practice. Organisations in this function facilitate controlled lab experiments, rig evaluations at testbeds, and live network pilots in operational settings.

Water utilities themselves play a central role in this function: hosting pilots on live or isolated assets, providing operational data, verifying integration, and planning roll-out. Private testbeds complement this with modular, repeatable facilities for independent testing and benchmarking.

Trials produce performance, integration and compliance evidence that gives utilities confidence to procure, helps regulators assess approvals, and enables investors to fund with lower risk. By proving reliability under field conditions and aligning with sector standards, testing turns prototypes into scalable, operational solutions and accelerates adoption.

#### Its relationship with the other functions

Testing builds trust and credibility across the ecosystem. It validates research findings, demonstrates readiness for funding, and proves operational viability for adoption. It generates compliance evidence for regulators and provides compelling results for communications to share with stakeholders.

#### Some notable organisations in this function are:



#### **Anglian Water**

Anglian Water's trial execution phase deploys new technologies across live treatment works, distribution networks and customer premises over a 6-12-month period. Trial execution is where pilots move from concept to real-world operation.



#### Scottish Water Horizons

Scottish Water Horizons provides real-world environments for testing and demonstrating new technologies. Their Innovation Voucher Scheme offers a unique opportunity to access essential resources and support to trial with up to 50% of costs covered.



#### Spring

In collaboration with the UK Water Partnership and Water Test Network, Spring has developed a searchable directory of testbed facilities which gives innovators much greater insight to the ideal facilities to test their new ideas, methods and devices.



#### WRc

WRc helps overcome uncertainty around performance and compliance by offering independent testing, certification, and consultancy. It enables innovators to validate technologies and gain sector trust through recognised standards.



# Tips for engaging with testing

Testing & validation is your moment to prove your idea works beyond theory. Testing can be completed in different ways: bench/lab experiments, testbed or rig trials, sandbox/digital-twin exercises, isolated non-production environments, and live network pilots.

The aim is to generate evidence on performance, integration and compliance that can move a solution forward.

#### Define your objective and acceptance criteria

To set up a successful trial, you first need to outline what it is you are trying to learn or achieve:

- What is the decision test will unlock (e.g., proceed to pilot, specify for procurement)?
- What are your success / failure metrics and thresholds (e.g., accuracy, reliability/uptime, response time, false-positive rate, data latency, cost per unit, compliance limits)?
- What is the baseline metric that you are trying to improve?

#### Choose the right test type & partners

Depending on your stage and needs, different types of testing (and therefore different ecosystem partners) will be appropriate.

- Lab/bench: principle, component or method validity.
- Testbed/rig: repeatable benchmarking; controlled variation of conditions.

- Sandbox/digital twin: integration and control strategies without asset risk.
- Isolated non-production environment: operability with realistic interfaces.
- Live network pilot: performance and operability under real conditions.

#### Write a test plan and protocol

Make the method explicit so results are trusted and repeatable.

- Hypotheses, test matrix, ranges and duration; sample sizes and run counts.
- Method references and QA/QC; calibration and checks.
- Environmental, influent and load conditions representative of use.

#### Define data and reporting

Make sure you close your test by creating artefacts others can act on, not just a slide deck.

- Pre-agreed calculations (KPIs, uncertainty, confidence levels).
- Reporting cadence and final deliverables (dataset, methods, results, one-page summary).
- Close-out and make results reusable
- Acceptance against criteria; failures and root causes.
- Recommendations for next stage (funding, regulatory submissions, adoption work).

# Getting the most from testing

Clearly define your objectives

1

Choose the right test type & partners

Be explicit about your test plan

3

Share your outputs in a way that the sector can use



# Implementation & adoption support

### Although a complex challenge, lots of organisations exist to support scaling and adoption.

Implementation & adoption support brings together the organisations that innovators can work with to help utilities adopt proven solutions. These organisations accelerate decision-making by packaging the evidence utilities need and unblocking procurement, integration, risk and change constraints.

The water sector is cautious and plan-driven. Business-planning and governance cycles are slower than most innovators. This function bridges the timing gap: it aligns innovation with utility practices and approval routes so a tested solution can enter routine use.

This support can take many forms, including clear synthesis of what exists and works; independent due diligence on products and suppliers; buyer-supplier brokerage; translation of trial results into business cases and procurement specifications; training and change support for operators; and roll-out playbooks for fast-followers.

Going from trial to business-as-usual takes significant effort and patience. Blending utility expertise with neutral intermediaries and supplier delivery capacity can significantly reduce friction and accelerate scale-up.

#### Its relationship with the other functions

Adoption turns innovation into impact. It draws on testing for validation, uses research to inform integration, and depends on funding for deployment. It requires regulatory clarity to ensure compliance, and benefits from communications to engage stakeholders and build momentum.

#### Some notable organisations in this function are:



#### Spring

Spring is the UK & Ireland's centre of excellence for water sector innovation, centralising intelligence from hundreds of past and current projects to spotlight what's already been trialled and proven.



#### **Thames Water**

Thames Water's Accelerating Innovation Portal offers a streamlined route from concept to contract. Suppliers register their solutions, attend quarterly webinars and engage directly with procurement and operations leads.



#### **Xylem Innovation Lab**

The Xylem Innovation Lab programs identify high potential technologies and then work with founders to bring them to market through licensing, white labelling, distribution or other commercial arrangements.



#### Isle Utilities: Technology Approval Group

Isle's Technology Approval Group's accelerates the implementation of high-TRL innovations by connecting technology developers with utilities and industrial endusers.



### Tips for engaging with implementation & adoption support

Implementation support helps you move from validated innovation to real-world deployment. The timing and type of engagement depend on your solution's maturity, strategic relevance, and the stakeholders involved.

The goal of engaging with this function is to move your solution through the complex process of water sector adoption.

#### Determine your audience

Adoption often has a different audience and higher evidence bar than other steps in the innovation process. Identify who needs to be convinced and what reassurances they need:

- Sponsor/asset owner, operations/maintenance, IT/OT & data, procurement/commercial, health & safety/compliance, finance.
- Regulators or standards bodies if approvals needed.

#### Match what you need to the right partner(s)

Choose the right type(s) of organisation to help you meet these needs. For example:

- Convenors/brokers (partner/site matching, sponsorship).
- Due-diligence/assurance (independent product/supplier checks, compliance evidence).
- Procurement/commercial advisors (specifications, evaluation criteria, contracting routes).

- Integrators/implementation partners (IT/OT/data design, commissioning).
- Operations/training/change (SOPs, specific training).
- Benefits & scale support (business-case structure, roll-out playbooks

#### Be clear on the ask, output and working terms.

As with the other functions, its important to be clear about what you are engaging with the ecosystem to support you to do, what success looks like and, critically, what the terms of any agreements are.

#### Be patient

The adoption of new solutions in the water sector takes time. Make sure to plan for this, and work with your partners to unblock the inevitable challenges that will arise.

Getting the most from implementation & adoption

Determine your audience

1

Match what you need to the right partner(s)

Be clear on the ask, output and working terms

3

4. Be patient



# Regulatory support & oversight

# In our highly regulated sector, clear requirements and assurances enable safe, lawful deployment.

Regulatory support & oversight ensures innovations meet legal, environmental, safety and consumer obligations, protecting people, ecosystems and public trust. It sets out what "good" looks like and provides routes to show that a solution meets it. Organisations in this function both define the rules and help you prove compliance.

Some organisations in this function clarify standards and accepted methods, offer pre-application advice and, where available, sandbox or controlled-trial flexibilities. Others provide the assurance pathway: accredited testing, independent verification and certification, and the approvals or permits needed for live operation.

Clear requirements and accredited evidence make progress possible without compromising safety or legality. Engaging with regulation early de-risks procurement and enables scale while protecting people, the environment and public trust.

#### Its relationship with the other functions

Regulators don't work in isolation, they rely on other parts of the ecosystem to shape, test, and communicate what's possible. Whether it is drawing on the evidence base created through research & development, new solutions being funded because of regulatory signals or adoption being enabled because of approvals, regulatory support and oversight touches, enables and sets the boundaries of the other functions.

#### Some notable organisations in this function are:



#### StreamLine

StreamLine is the joint regulatory advice service for innovators and businesses in England and Wales, run by Ofwat, the Drinking Water Inspectorate and the Environment Agency to support innovation and help navigate water sector regulations.



#### The Commission for Regulation of Utilities

CRU helps reduce regulatory uncertainty for innovators in Ireland by providing clear guidance and performance benchmarks. It ensures equitable access to water services and supports innovation adoption across utilities.



#### Water UK

Water UK addresses fragmentation in industry representation. They promote best practice, represent the UK water industry in discussions with government, NGOs, regulators and in international forums and encouraging innovative policies that tackle big issues.



# Water Industry Commission for Scotland (WICS)

WICS is Scotland's economic regulator for water services. They shape service levels, efficiency incentives and investment plans, inviting stakeholders to contribute evidence and views on future charging frameworks.



### Tips for engaging with regulatory support & oversight

This function clarifies requirements and provides assurance that they are met. Engage early to align design and testing with accepted methods and to plan the route to approvals or certification.

#### Identify scope and regulatory touchpoints

Be clear what obligations your solution may trigger and where assurance will be needed.

- Be clear on your intended use, users and operating context, and the regulation you will need to comply with to do this (e.g. Reg 31 for potable water or ATEX for safe operation in potentially explosive environments)..
- Are there any non-water sector specific requirements (e.g., IT/OT, data protection, safety)?
- Map out what you need to do to comply with each of the relevant standards or pieces of regulation.

# Engage the right organisations to help you prove compliance

Assemble the right mix for advice, methods and evidence. Typical roles and their responsibilities include:

- Regulators/competent authorities: guidance, approvals/permits, sandbox terms.
- Standards bodies: accepted methods, limits, conformity routes.
- Accreditation bodies & accredited laboratories: recognised testing and reports.

- Certification/verification bodies: conformity certificates, product/material approvals.
- Neutral intermediaries/clinics: translate requirements, steward applications.

#### Plan timing and dependencies

Regulatory work can have significant lead times, make sure that you plan accordingly.

- Engage before test design, before trials that touch live networks or customers, and ahead of procurement that embeds compliance terms.
- Map dependencies (e.g., accredited test slots, sampling windows, audit dates).

**Tip:** Including regulators early in project steering groups or advisory roles can significantly improve project success. Early engagement helps navigate regulatory challenges, provides real-time feedback, and gives regulators valuable insight into emerging barriers, often paving the way for future regulatory improvements.

Getting the most from regulatory support & oversight

Identify scope & touchpoints



Engage the right organisations

Plan timing & dependencies

3



# Communication, collaboration & networking

### There are many ways to understand, contribute to, and learn from our ecosystem.

Communication, collaboration and networking describes the sector's shared infrastructure for exchange: the organisations, platforms and forums that keep actors informed, connected and aligned. For innovators, this function makes it easier to find partners, understand priorities, share results in usable formats and join collective efforts.

Organisations in this function curate and disseminate insights (think reports, case studies, newsletters, podcasts and sector media); convene communities of practice, working groups, webinars and workshops; host conferences and events; maintain online directories and opportunity boards so partners can find expertise; and facilitate peer exchanges and co-design sessions that surface lessons and align on challenges.

There is no single "time to engage" with the sector. Use this function continuously so your evidence is visible, and you are connected to sites, opportunities, funders and decisions when they arise.

#### Its relationship with the other functions

Communication, Collaboration & Networking is the connective tissue of the innovation ecosystem. It links research, testing, funding, regulation, and adoption so they work together, not in silos but as parts of a shared effort.

Without it, innovation stalls, research unread, trials unseen, funding unnoticed, regulation misunderstood, adoption delayed. With it, ideas move from possibility to practice, creating impact that lasts and grows.

#### Some notable organisations in this function are:



#### The Water Report

The Water Report distils market intelligence, policy updates and innovation news into a concise weekly briefing. Subscribe to receive the insights straight to your inbox and join their live Q&As to pose your questions to fund managers and sector analysts.



#### Northumbrian Innovation Festival

Each year, Northumbrian Water runs an innovation festival focusing on water company challenges and broader environmental issues, aiming to solve them in a week through a series of workshops and design sprints.



#### **British Water**

British Water represents the interests of UK water and wastewater supply chain companies, helping to grow their members' businesses and promote best practice. They also provide independent thought leadership, to tackle the challenges facing the sector.



#### Wise on Water

Wise on Water is a communications agency specialising in partnerships with technology and engineering companies in the water and wastewater sector. They help organisations clarify their market positioning, differentiate themselves, and communicate strategically.



# Tips for engaging with communication, collaboration & networking

This function keeps the sector informed and connected. Use it to find partners, surface opportunities, share results and stay visible.

#### Clarify purpose and audience

To get the most out of interacting with organisations in this function, you need to know why you are engaging and who needs to hear what you have to say. You may have several of these.

- Purposes can include partner/site search, call for data, share trial results, recruit collaborators, signal readiness, policy input.
- Audiences can include utilities and operators, funders, regulators/standards bodies, suppliers, researchers, local stakeholders/communities.

#### Pick the right channels and convenors

Align your purpose and audience to the forum you're engaging with.

- Neutral convenors and directories: listings, partner matching, opportunity boards.
- Trade bodies & professional institutes: supply-chain groups, technical committees, communities of practice.
- Sector media & newsletters: announcements, case studies, thought pieces, podcast slots.
- Events: webinars, workshops, conferences, showcases, hackathons.
- Working groups: themed programmes where peers compare methods and results.

#### Be aware of duplication and overlap

The sheer amount of sector activity can lead to some duplication. Do what you can to avoid this.

- Scan directories, convenor round-ups and recent case studies before launching a new initiative.
- Ask convenors about ongoing work and who is already doing something similar.
- If you spot overlap, be a connector: make introductions, share context and help teams align.
- Promote collaboration over parallel efforts

# Contribute value, don't just promote your solution

Frame your contributions to the ecosystem around value not marketing. Focus on things that others can use, test, compare to, or decide on, not simply sales collateral.

# Getting the most from communication, collaboration & networking

Define the 'why' and 'who' of your engagement



Pick the right channels and convenors

Be aware of duplication and overlap

3

Contribute value, don't just promote your solution



# Conclusion

## This ecosystem guide is a snapshot of how the sector innovates

Since the Water Innovation Strategy's original launch in 2020, the water-innovation landscape has become more complex. New technologies, shifting policy priorities, and a wider pool of innovators mean the sector needed clearer guidance.

Feedback from utilities, regulators, researchers, and start-ups is consistent: the existing strategy is valuable, but it should be more intuitive, inclusive, and dynamic.

This companion to the WIS, alongside the interactive Ecosystem Guide, helps new and seasoned innovators to find their place, connect with partners, and move ideas into delivery.

Spring is proud to act as custodian of the Water Innovation Strategy and this Ecosystem Guide. Our role is to keep it credible, inclusive, and practical. We maintain it as a live resource, enable feedback, and support its use across the sector.

#### Scope for further work

We recognise that innovation happens across the whole water system, from catchments and agriculture to utilities, supply chains, housing, industry, and communities. This document focuses on the ecosystem that supports innovators, rather than cataloguing every organisation doing the work. There is space for the sector to explore a fuller mapping of delivery actors in future, where that would aid adoption and outcomes.



#### How to contribute

The Water Innovation Strategy Ecosystem Guide is a living resource. Your input keeps it relevant, practical, and useful.

If your organisation isn't listed, or your work has changed, submit an update.

- The name of your organisation
- Your areas of focus / the barriers you help overcome
- How to get involved
- Type / sector
- What you do
- Your website

Visit <u>the Living Database</u> to see if your organisation is included. <u>Use the submission form</u> to add your organisation.



