
Driving Transformational Innovation in the Water & Waste Water sector

AN ALTERNATIVE SPECIALIST PERSPECTIVE

Applauding Ofwat's aspirations to create policy and stimulus to drive innovation and transformational change across the water sector. Thank you for providing this consultation process inviting feedback regarding your proposed strategy. Please find below responses to the eight consultation questions.

My experience and position

The views offered here-in are informed through my work as an independent, practitioner & advisor in strategy, transformation and 'bottom up' systemic innovation. My innovation and consulting experience pertains to organisation & management originating in AMP 2, 3 & 4, then applied and further developed within:

- (a) a decade long innovation pilot for regional integration in the UK public sector
- (b) a national water company in the Middle East undergoing privatisation
- (c) design of an insight & innovation centric, 2nd generation, national centre of excellence

Key points made within this paper

Systemically the proposed strategy could be regarded as sub-optimal carrying **considerable enterprise risk of 'lost national opportunity'** in regard to innovation, transformation, value and benefit. The orientation and configuration of the strategy is unlikely to create the conditions for a high performance 'organisational engine' to power innovation and drive transformation within the sector. The proposals could be perceived as weak in terms of strategy engineering and systemic value.

There may be better approaches to consider, one of which is outlined below. It suggests that an alternative scenario be fully explored through a 'straw man' strategy concerning a national centre of excellence configuration that may not be in the public policy making and advisory domain.

I trust that the specialist insights shared here-in are useful to support both Ofwat and their advisors in creating the most efficient and nationally beneficial strategy, engineered to drive innovation and transformational change within the sector.

Glyn Owen

Independent advisor in strategy, transformation and innovation.



2. Innovation in the water sector - our challenge to water companies

Q 1 : What are the main barriers to innovation in the sector and why ?

- a. **The industry / business 'operating model'** is designed to promote and maintain a dominant commercial (cost, financial & profit driven) paradigm. This fuels industry systems, corporate cultures, organisational processes and behaviours throughout the whole supply chain that severely inhibit and narrow the scope of innovation. Creating barriers to innovation is an unintended consequence of the the present operating system, typically leading to only innovation that can be easily commercialised, such as new products (to make profit) survives.
- b. **There is currently no independent, innovation and insight national centric centre of excellence serving the whole industry sector. It could be** designed and engineered to connect with, stimulate, engage, support and enable innovators from across the whole sector (e.g. regulator, customer, water companies, suppliers & individuals).

The source of innovation most often originates from a particular type of individual called a **positive deviant** (an innovator that thinks differently from the prevailing culture ... 'out of the box'). They can be anywhere and in any discipline within the whole national supply or customer chain of the U.K. water industry and beyond.

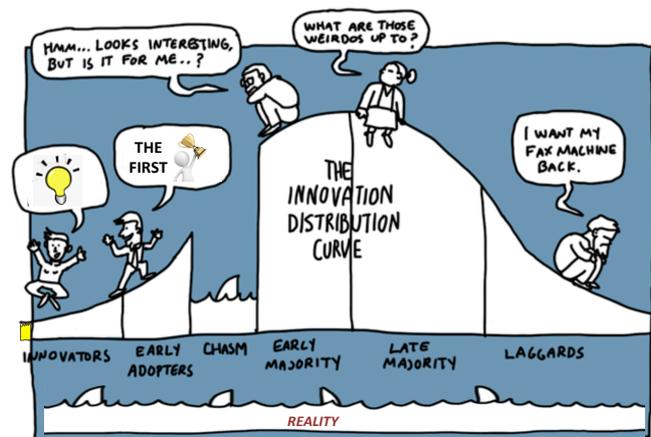
From the initial spark of an idea or insight it may take considerable resource, effort and time (perhaps decades) to realise, mature, scale, commercialise and then harvest an innovation.

Innovators operating within contemporary business organisations can face extreme cultural and organisational challenges in terms of ridicule,

marginalisation and burn-out through lack support and resources. Furthermore with an over-emphasis on cost reduction, performance improvement and more for less by regulators, executives, managers and corporate shareholders there is often little available energy, appetite or resource to do anything but deliver. This can run through the entire supply chain, hardens at times of austerity, recession, uncertainty and market instability.

For innovation initiatives requiring perhaps a generational incubation period (upwards of 15 years) before policy making, commercialisation or the sectors needs sufficiently matures, investment is highly unlikely from a business community.

Summary point: Companies thriving on innovation often have a dedicated, appropriately resourced and protected organisation systems separated from the conventional business culture. Strategic focus and emphasis is on support and enabling the innovators.



2. Additional financial support, competition model & end of period reward.

Q:2 Do you think that the financial support cited in section three is required to stimulate innovation in the sector? If so, what do you believe is the appropriate amount of funding and why?

Q:3 Do you agree that our proposed draft principles for additional financial support will effectively safeguard the interests of customers?

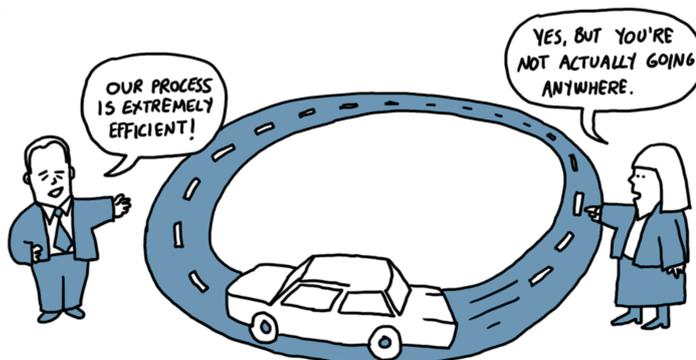
Q:4 What are your views on the collectively funded innovation competition model which we describe in section three? What other key considerations not highlighted should we take into account in designing/ implementing the competition?

Q:5 What are your views on the end-of-period innovation roll-out reward we describe in section three? What other key considerations not highlighted (e.g. whether it should be collectively funded or individually funded) should we take into account in designing/ implementing the reward? What other potential alternative mechanisms for funding/ rewarding innovation not discussed do you think we should be considering?

Q:6 Which financial support mechanism or combination of mechanisms should we introduce and why? What would be an appropriate split of available funding/ reward?

Yes funding support circa. £200 million is required to stimulate innovation in the sector. However I strongly believe that the current proposals carry substantial risk of sub-optimal systemic results and significant lost innovation / transformation opportunity for the sector.

The competition model and proposed safeguards may in reality stimulate corporate behaviours of gamesmanship, new departments and roles, creative accounting and strategies to win / chase relatively small amounts of investment in context of big business interests.



Also considerable management consulting effort and costs could be expected in-order to establish, audit, develop, manage and report the scheme. These costs could be significant and perhaps better utilised for grass roots or bottom up innovation.

The strategic orientation and engineering of the proposed strategy may carry substantial hidden risk against achieving best national value and also Ofwat's aspirations of:

- (a) driving transformational innovation.
- (b) driving transformational change through innovation in the sector.
- (c) increasing value to customers and UK national interests.
- (d) enhancing the resilience and operations of the sector.

Furthermore the potential for corporate and audit gamesmanship associated with the proposal is likely to divert funds, focus, attention, resources and energy away from stimulating, incubating and liberating genuine 'bottom up' innovation effort.

Summary point : As a primary or flagship strategy the competition model with its mechanisms and safeguards, absorbing potentially £200 million public investment, could be considered fundamentally flawed in terms of strategy engineering, orientation and organisation design that aims to enable innovation to drive transformation.

Outlining an alternative, contrasting, strategic scenario

In contrast there may be an alternative strategic configuration regarding a national Centre of Excellence approach that offer considerably better strategic value, less enterprise risk, significantly more systemic opportunity and national benefit than the option presented in the consultation paper.

Consider £200 million customer funding channelled via the water companies exclusively as seed funding to establish a world leading, independent, not for profit, national centre of excellence, under the umbrella and / or custodianship of Ofwat (*the scenario is further detailed in sections 4 & 5 below*).

4. Other potential industry activities

Q 7: Do you think the potential industry activities discussed in section four could help drive innovation? Are there other activities not identified which you think the industry should be considering?

Yes all the the activities described could assist innovation but is unlikely to drive it systemically throughout the sector. However, as previously mentioned, the strategic orientation and configuration of these activities in their presented form may result in substantially sub-optimal results, strategic underperformance and significant lost systemic opportunity for transformation.

Alternative Centre of Excellence 'straw man' scenario

Building upon the response to section 3 above. Exploring and developing alternative strategic configurations can be assisted through 'straw man' scenarios. For example consider that £200 million customer funding is channelled via the water companies exclusively for seed funding to establish a world leading, independent, not for profit, national centre of excellence, under the umbrella and /or custodianship of Ofwat.

Match funding could be sought through membership and sponsorship from the supply chain, water companies and individuals. In this manner the C of E can be truly designed as an **independent national partnership to stimulate, enable, leverage and harvest all potential innovators from grass roots through to large corporations.**

To be most effective the resources, support and stimulus must be focussed on the innovators & positive deviants (*see answers to question 1*) critically not within water companies. Also the C of E can be designed to tackle multiple systemic problems in the UK and international water sector such as: creating and sharing best practice insight & innovation, retention of depleting and ageing skills and a gross lack of independent advisory.

Some features of an alternative C of E led strategic scenario could involve:

- £200 million over the period of 2020 to 2025 would be the customers contribution as initial seed funding for an innovation & insight centric CofE.
- After 2025 the C of E to be self-funding by the industry and paying back a return on the customer investment.
- A not for profit organisation, in partnership and serving the whole sector equally, retaining knowledge and insight for the whole system. This can avoid the domination by commercially driven agendas, cultures and systems & big business mind sets of the water companies and their shareholders.
- C of E income supplemented through membership subscription including the water companies, suppliers, individuals within the U.K. and overseas.

- Competition and awards (funded through big company sponsorship suppliers and water companies) that introduce, promote, incentivise and support innovation initiatives.
- Income supplemented through a portfolio of trusted independent advisory products and services. (*There are problems internationally regarding advisory practice with regard to impartiality, best practice, transformation and innovation*)
- Retention and usage of experience & skills from an older retiring generation.
- Research, development, capture and promotion of best practice.
- Innovation incubation, stimulation support, development and scaling.
- Knowledge management and systemic leverage of insight.
- Pathways to better regional collaboration.
- International and national leadership in best practice, privatisation, innovation & independent advisory.
- Increased UK contribution to global sector innovation (from 3% to 10 % of the global sector innovation market)
- Enabling export and show casing of UK plc innovation, products & services.

Although the C of E activities seem similar to those detailed in the consultation document the strategic, organisational focus, problem and solution sets are perhaps sufficiently different to offer considerably enhanced strategic success, benefit and opportunity to drive and achieve transformation.

Summary point: *The strategy configuration outlined above, I suspect, is neither in the advisory or public policy making domain. As a 'straw man' scenario it could be used to help better inform and explore strategic alternatives that offer a stronger, more resilient 'organisational engine' to enable systemic innovation and insight that effectively drives transformation.*

5. Regulation as an enabler for innovation

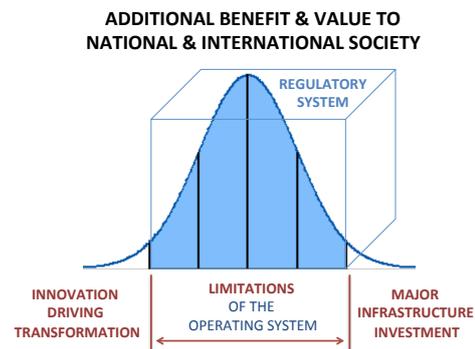
Q 8: Do you think the proposals in section five will help drive innovation? Are there other activities not identified which you think Ofwat should be considering?

The proposals in section five may enable some forms of innovation however there are perhaps more impactful approaches and strategies that could be considered.

1. Enlarge the role of Ofwat beyond regulation.

Ofwat have a significant role and influence in establishing and maintaining the sector operating system, business practices and models. That is an industry organisational system within a regulatory framework that:

- inhibits systemic innovation
- is challenged in achieving major infrastructure investment.
- enables the UK sector to contribute only 3% to global innovation.
- creates a plethora of issues regarding systemic resilience for future generations



An enlarged role might involve a deepening of custodianship and leadership development that takes responsibility for the healthy functioning of all parts of the 'whole' system. Including addressing or making provision for the unintended consequences caused by the regulatory operating system of the industry.

'Regulation as an enabler to innovation' is perhaps an extremely limiting field of inquiry. Innovation and transformation by their nature reside 'outside the box' so perhaps the inquiry could be re-framed as the following question. How can Ofwat as a regulator expand its role and responsibilities to fully enable innovation and drive transformation for the greatest benefit of the whole sector and national interests?.

Summary point: *Perhaps two functions could co-exist within Ofwat one to 'work within the regulatory system' and the other to 'work on system' that is a regulator function and custodian / innovation enabler function.*

2. Create an independent, world leading centre of excellence either alongside or under the umbrella / protection of Ofwat.

An independent, world leading, not for profit, self funding, centre of excellence could be designed and developed to drive transformation in a), b), c) & d) above. Furthermore the

systemic value and benefits that this can bring both nationally and internationally could be significant.

Summary point: *The 'straw man' scenario described in section 4 offers the potential of an innovative frame or alternative lens through which to explore what a next generation regulator identity might look like as it operates alongside or through a world leading Centre of Excellence.*

3. Ofwat leads the co-ordination of innovation across sectors

The consultation strategy proposals correctly identify gaps regarding the co-ordination of innovation and insight across industry sectors. As an example for two decades the author has personally experienced the challenges of creating innovation related to organisation & management. Innovation originating in the supply chain of AMP 2, 3 & 4 was taken out of the water sector into the Welsh public sector to support a decade long regional integration pilot. Simultaneously this was taken into a middle east national water company undergoing the transition into privatisation. Insight and solutions from both fields then informed a 2nd generation (*after 15 years public funding*) national C of E strategy in the Welsh infrastructure sector.

Note: These innovation insights and solution sets continue to remain outside the public policy making and advisory domain in all these sector.

Innovation and innovators may operate under the radar of contemporary best practice in order that the innovation is protected, nurtured and strengthened before 'emerging out of the greenhouse' into the marketplace. Furthermore systemic innovation may require a generation (15 to 20 years) to incubate in preparation for the future market or societal need. Corporations operating within the regulated business system are unlikely to support such initiatives.

Summary point: *The straw man C of E scenario in section 4 can offer a frame to explore how Ofwat could become a leader in cross sector innovation and insight co-ordination.*

4. Heed potential enterprise / systemic risk warnings of the highest ranking.

Enterprise / systemic risks of a cultural and perceptual nature are often very difficult to spot, raise, act upon and mitigate. The adverse implications from these cultural blind spots on systemic strategy and decision making can be significant and far reaching.

Potential blind spot 1: There is a tendency for financial, contractual / legal dominated professional mindsets to attempt to offset risk and management responsibility down a supply chain towards parties that are not best placed to either manage the risks or optimise the opportunity. It would be reasonable to anticipate the risk of this tendency within a regulatory culture.

The strategy proposed within the consultation document seems to be underpinned by such mindsets evident by the responsibilities for innovation and an industry centre of excellence being seemingly pushed towards a highly fragmented body of business-centric water companies. As mentioned above, systemic innovation may require a generation (15 to 20 years) to incubate. Corporations operating annual profit accounts within the five-year regulated business system are unlikely to support and invest in such initiatives. Such innovation and transformation opportunities may consequently become inhibited, frustrated or fail.

Potential blind spot 2: The proposed strategy configuration and orientation may be considered as offering a weak, sub-optimal, strategy in regard to enabling systemic innovation that drives sector transformation and providing better national benefit / value.

This may indicate underpinning potential issues in any of the following areas namely a) the process of strategy forming b) organisation and strategy designs optimising innovation and transformation c) advisory insight and practice d) client awareness and / or support to explore systemic innovation and transformation.

Summary point: *The 'straw man' alternative C of E scenario, described in section 4, may offer Ofwat and their advisors an innovative frame or lens to explore and address the issues raised above. The scale of national opportunity offered by a high performing organisational system enabling innovation capable of driving systemic transformation is exciting and perhaps nationally significant. It would be a great national shame to waste this opportunity on a weak poorly informed strategy.*