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# The optimal delivery model for AMP8

A view from the supply chain

July 2022

## Foreword

The Ofwat regulated water sector is currently in the third year of the five year Asset Management Period (AMP) 7. However, focus is now starting to shift to planning for AMP8, including Price Review 24 (PR24). Commencing in 2025, the next regulatory period is expected to provide further challenges for the English and Welsh water companies. This is illustrated by ambitions set by Ofwat around affordability issues; customer expectations on service, society, and the environment; and the requirements for climate change resilience and the drive to net zero.

These are compounded by challenges in the supply chain which is:

- showing increased fragility as demonstrated by the recent failure of a key tier one supplier in the sector
- facing capacity and capability issues and inflationary pressures that are exacerbated by the opportunity for more attractive returns in other sectors, underpinned by strong long-term demand industry wide.

These factors prompted a small group of tier one suppliers and consultants to work with the Water Industry Forum (WIF) to explore ways, based on their own experience, to help:

- water companies deliver against their expected AMP8 outcomes
- develop the sustainable supply chain ecosystem required to deliver AMP8 and future AMPs.

A series of workshops facilitated by WIF, supported by Turner & Townsend, were undertaken by the group in late 2021 and early 2022. Feedback on a draft version of the paper that resulted from these sessions was received from a group of water companies at a workshop in March 2022. The British Water Supply Chain Task Force, which has been established to identify, assess and report on some of the key challenges that the water sector supply chain faces in the areas of procurement, innovation and cyclicalities, has also reviewed this paper.

The outcome of this work is summarised in this report.

It should be noted that whilst whole life cost decision making based on totex principles has been factored into the thinking of the group, delivery models have been solely considered for capital interventions due to the regulatory challenges that exist with implementing a totex approach.

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Feedback was obtained from representatives of the following, and where appropriate, reflected in this paper:

**Affinity Water**

**British Water Supply Chain Task Force**

**Dŵr Cymru Welsh Water**

**nmn (prior to the acquisition by Galliford Try)**

**Northumbrian Water**

**United Utilities**

**Yorkshire Water**

## Introduction

Since privatisation in 1989, the capital delivery processes and commercial models used across the water sector have delivered multiple benefits for customers and the environment including reduced pollution and increased resilience, water quality, service levels and efficiency.

The supply chain is proud to have played its part in helping to deliver these achievements. However, over successive AMP cycles, the efficiencies sought by the regulator have made it increasingly difficult for both the water companies and their supply chains to deliver the challenging targets that have been set.

AMP8 is expected to be even tougher with stakeholders beginning to ask where the expected further efficiencies are going to be found in a supply chain that is already under pressure. At the same time, the world has changed with requirements such as net zero targets, sustainability and social value requirements increasing delivery pressures.

Whilst these and other challenges exist, the contributors to this paper still feel that the sector can provide a long-term opportunity for the supply chain, with its multi-billion pound annual programmes of work that support delivery of a critical service for customers and society as a whole.

## The challenges for AMP8 and beyond

AMP8 is set to be procured against a challenging backdrop with rising costs (year on year 24.5 percent material cost inflation, for example, in March 2022, BEIS) driven by general and construction inflation; and supply chain issues because of Brexit, Covid-19, the Ukraine war and increased demand in other sectors. A more diverse programme of work driven by factors such as net zero, social value, nature-based solutions and partnership working also requires a re-think of project delivery life cycles and client-side capability.

Furthermore, there is a shortage of skilled resources and a reduction in capacity of the market. Research indicates that there has been around a 50.0 percent reduction in the number of tier one contractors in the market since the start of AMP5 due to acquisitions and administration (as evidenced by the recent case of nmcn, a key tier one supplier). Some companies are also leaving the sector due to a strong long-term pipeline of work across the wider infrastructure market. This has enabled many suppliers to focus on other sectors which are viewed as providing lower risk / more attractive returns. The exit from the water sector is partly driven by the low profit margins in the water sector. Analysis by one of our contributors suggests that several tier one suppliers are making less than 1.0 percent profit before tax from the sector and some are making annual losses on a regular basis.





One contributor indicated that, due to the volume of work in the wider market, his organisation is not bidding for work which does not fully sit within internal governance 'red lines'. These include Fit for Purpose requirements, liability for existing asset condition, and liability for client provided information and documentation, which many water companies have previously sought to impose on the supply chain. This suggests that water companies will need to review the approach to risk allocation and focus far more on becoming a client of choice and attracting suppliers than previously.

The conclusion is that the existing delivery models have not supported a sustainable supply chain at tier one level nor down into tier two+.

Future delivery models must help to address this issue and support development of a supply chain that enables companies across all tiers to grow and develop, otherwise the long-term viability of many of the water companies' key suppliers will be at threat.

Consequently, there is a need to ensure that future delivery models implemented in AMP8 and beyond focus on ensuring a sustainable supply chain ecosystem. This will attract suppliers to the sector, increase competition and reduce the risk to water companies of supplier failure.

## Potential impact of these challenges on AMP8 delivery

Unless the challenges outlined are addressed, the AMP8 delivery landscape is likely to include significant systemic risks to companies and the sector as a whole due to:

- further supplier failures
- more suppliers moving away from the water sector and a shift in the supply-demand balance with suppliers choosing who they want to work with
- increases in supplier cost bases significantly above Consumer Prices Index including owner occupiers' housing costs (CPIH) values recognised by the regulator
- a significant re-balancing of the risk transfer positions which some water companies will be ill equipped to manage.

Ultimately such factors may mean water companies are not able to deliver the required outcomes within the regulatory funding envelopes.

## What can we learn from past AMPs to help us meet these challenges?

Over previous AMP cycles the full gambit of delivery and contracting models have been deployed in one form or another with varying degrees of success. The working group used their experience of these models to identify improvement opportunities that could contribute to the successful delivery of AMP8. These opportunities are identified below.

- **Full alignment between the desired ways of working and the contract model** – Water companies must be clear on the way they wish to engage with the supply chain (from fully outsourced to integrated / alliancing to transactional) and ensure the form of contract and the commercial model underpin this.
- **Client-side capability / capacity / culture** – Ensuring alignment between the chosen delivery model and the client-side capability, capacity and culture to effectively manage the delivery model is key. If a water company intends to undertake an Intelligent Client role, for example, it needs to be set up to operate as such either through upskilling or using the consultancy supply chain.
- **Effective risk management** – Greater focus on the allocation of risk (including risk associated with existing asset performance and client-side definition of the solution) to the party best placed to manage the risk. Water companies need to build greater capability to fully understand risk and the impact, including cost premium, of transferring risk to the supply chain.
- **KPIs and incentive models driving desired outcomes** – Incentive models / KPIs need to ensure that they drive the outcomes sought and are better aligned with water company Customer Outcome Delivery Incentives (ODIs) . The KPIs need to be underpinned by clear metrics, based on accepted industry standards, to drive requirements such as net zero and social value. However, the direct pass through of ODIs to the supply chain is unlikely to be palatable. This is because of the disparate level of the associated risks and rewards and the inability of the supply chain to control all influencing factors.
- **Focused framework scopes** – Due to the expected diversity of work types in AMP8 it is important that there is full clarity on the optimum work type for specific frameworks, and the avoidance of frameworks that cover too broad a range of work types. This will reduce opportunities for specialist organisations and could impact on innovation and productivity potential.
- **Alignment between framework scopes / scale and actual delivery requirements** – In ensuring scope is aligned with the actual delivery requirements the water company can have greater confidence that the successful bidder is best placed to deliver the requirements. It also ensures the commercial negotiation does not have to be reopened post procurement when there is no competitive tension.
- **Work allocation** – It is important that work allocation occurs at the appropriate time. If work is allocated to the supply chain too early there is a risk that the solution could be conditioned to the skills of the specific supply chain partners and /or disincentivise no-build type solutions
- **Mini-competitions** – Mini-competitions under frameworks can produce specific 'spot buy' type gains, enable the demonstration of perceived 'value' internally within water companies (particularly at a time when budget setting based on historic costs is becoming less and less relevant) and drive reduced timescales to set a contract award price. However, their use should be strategic with the understanding that they add to the cost base of the supply chain which must be recouped across an AMP. Clear and unambiguous bid documents and limited numbers of bidders can mitigate the impact of mini competition. Clear documentation enables bidders to focus more on innovation rather than spending time clarifying ambiguities.
- **Hybrid ways of working** – There are examples where delivery models aligned to good practice have not been fully enabled leading to sub optimal / hybrid ways of working. This leads to what has been termed as the 'tumble dryer' effect by one company whereby man marking, role duplication and unclear governance becomes endemic. Projects can then get passed back and forth between different parties / functions leading to significant re-work, additional cost and loss of delivery time in an effort to meet affordability challenges.

Whilst workshop attendees acknowledged that the sector has often been at the forefront of the use of innovative delivery and commercial models, it was felt that these have not generally been implemented in a way which optimises performance, as illustrated by the improvement opportunities above. These missed opportunities are leading to inefficiency and increased cost for the supply chain in an already low margin environment. This in turn is contributing to supply chain fragility and suppliers exiting the sector.



## Proposed way forward based on the group's collective experience

An extensive analysis of other sectors undertaken for the working group by Turner & Townsend confirmed that, whilst there are learnings which can improve performance, there are no radically different approaches that can be deployed into the sector which are not already in use in some form. In short, there is no silver bullet - rather the solution lies in more effective application of existing models and alignment with the client-side capability to underpin effective delivery and facilitate a sustainable supply chain ecosystem.

The working group agreed that the following principles were key to success in AMP8:

- using the right model in the right circumstances
- ensuring all key delivery roles, (with reference to the Infrastructure Client Group's / Institution of Civil Engineers' Project 13 enterprise model), are fully understood, allocated and fulfilled to the required standard without gaps or overlaps
- ensuring commercial models drive total alignment and incentivise all parties to reduce waste and delay and increase end to end productivity whilst supporting the supply chain ecosystem. Incentives should encourage no build solutions or alternative approaches such as nature or catchment-based solutions early in the process whilst providing an appropriate share of gain / pain to reflect any reduction in overall scope of work. One water company is addressing this by using a Strategic Planning technical partner, during the early project stages, with a tightly targeted incentivisation model
- client-side models should have clarity of approach which is driven consistently across the water company and the supply chain, and aligned to the contracting models
- delivery models should be aligned to the work types and volumes they cover and the principles of the model should not be diluted by significant changes to these after the award of frameworks.

As AMP8 is expected to comprise the most diverse workload since privatisation no one delivery model will optimally address all work which encompasses factors such as:

- an increased proportion of smaller, less complex capital maintenance projects
- an increased focus on nature based, low carbon schemes
- the need for development of more strategic catchment / urban level integrated solutions
- a baseload of conventional 'concrete and pipe' solutions
- a significant volume of large / 'mega' projects, particularly associated with addressing water supply-demand deficits.

Combining the group's collective experience and expected AMP8 needs, the two delivery models outlined below - Programmatic approach and Client-side ownership approach - are proposed as being the key building blocks for successful AMP8 delivery. Although they are idealised approaches, they are applicable to both infrastructure and non-infrastructure work, and can be used in a complimentary manner to cover all aspects of the expected AMP8 programmes. Whilst focussed on the relationship between the water company and its directly contracted supply chain, they both support a sustainable supply chain ecosystem by enabling a more integrated approach across all tiers.

The Programmatic Approach with visibility of a committed and adequately defined long-term workload allows for a long-term sustainable relationship with the supply chain. The Client-side ownership approach, with late engagement with the supply chain, gives the supply chain certainty of requirements and clarity on process and integration risk.

### Programmatic approach

- Based on alliancing principles this approach is appropriate for sufficiently large packages of work with full clarity in terms of outcomes, timescales, and budgets.
- A fully integrated and collaborative approach is adopted to taking the programme from identification of need to commissioning and handover of the completed interventions using a broad range of skills from the supply chain.
- To support a sustainable supply chain ecosystem such work packages would need to be incentivised in a way that innovation and investment by the supply chain resulting in increased performance are rewarded.

### Client-side ownership approach

- A “Point and shoot” model where the delivery supply chain is only contracted once an Intelligent Client has defined the solution, determined the risk, confirmed the affordability and where the supply chain is absolutely focussed on efficient delivery of a defined solution and not encumbered by the ‘tumble dryer’ effect or other drags on efficiency.
- This supports the development of a supply chain ecosystem, and increased efficiency for companies, through the ability to target work directly to the appropriate tier in the supply chain.
- Although it does require increased client-side capability and capacity this can potentially be sourced from the consultancy supply chain if it is not possible / desirable for this requirement to be met fully met in-house - albeit it is seen as being critical that the water company still has a core in-house capability and expertise.

Both approaches cater for differing levels of control that clients may wish to retain over their programme while also allowing flexibility of work type. The main features of a Programmatic Approach are shown in Appendix 1, whilst those for a Client-side ownership approach are shown in Appendix 2.

### Other factors for successful implementation

To ensure successful implementation of these delivery models, and to be viewed as a client of choice, other key factors that were identified by the working group are listed below.

- Supporting the supply chain ecosystem with fair profit and an appropriate risk allocation at all levels. This includes understanding the supply chains’ expectations regarding fee/profit if, for example, there is no incentivisation mechanism
- Committed work-banks to give supply chain certainty to enable investment and innovation
- A contractualised efficiency gains mechanism where efficiency benefits are shared by those who cause them
- A minimal number of focused KPIs that drive the sought outcomes
- Financial investment and sharing of risk with suppliers by the water companies regarding innovation
- The required capacity and capability within the water company to effectively undertake their role (a critical requirement)
- Risk allocation to the party best placed to manage it

## Conclusion and recommendations

Due to the changing landscape and challenging headwinds, a new approach will be required for AMP8 to further increase efficiency, reduce waste, deliver water company business plans within budget and avoid the risk of incurring significant performance commitment penalties.

The two delivery models outlined in this paper provide a vehicle for the water companies to avoid the issues and inefficiency that our analysis has highlighted with many of the delivery approaches used to date. Furthermore, they provide clarity of approach and incorporate the key principles required for a company to be seen as a client of choice. This ensures they are attractive to the supply chain in an ever more competitive market, whilst enabling the scale of efficiency gains expected to be required of companies. As highlighted at the outset of this paper, this is particularly important given the cost and scarcity of resource pressures that exist within the present market. It will also help to mitigate the current supply chain fragility through the creation of multi-tier ecosystems that drive innovation and increase social value.

For the Programmatic or the Client-side ownership approaches to be effective it is critical for water companies to have the capability and capacity to effectively undertake the role required of them by these approaches. In implementing either approach due consideration needs to be given to the supply chain ecosystem and ensuring it is sustainable. There is also a responsibility for tier one contractors to ensure that the way they contract with lower tiers supports the supply chain ecosystem. This will allow the wider supply chain to thrive and work more collaboratively. Failure to do so will be to the detriment of all parties.

By continuing on the current path where water companies largely operate in the space between these two approaches, the working group believes that they will simply face the same delivery issues of previous AMP cycles and put increasing pressure on an already fragile supply chain. Adopting the principles in this paper, however, will facilitate opportunities for a green, inclusive and productive future for the water sector as a whole.

## Appendix 1: Programmatic approach

### What is it?

- Integrated delivery team (IDT) given a defined programme at the outset and fully empowered to deliver the outcomes to time and budget
- Supply chain and water company are jointly incentivised to deliver the outcomes

### Innovation

- Increased opportunity of innovation as supply chain have visibility and certainty of work bank
- Programme level incentives should encourage innovation through joint funding

### How work is allocated?

- Best athlete based on indicative principles
- Incentives can be developed to support an eco-system below the main players

### When is the supply chain engaged?

- Early engagement and onboarding of the supply chain in order to optimise programme delivery over the AMP
- Programme committed at outset

### Key requirements

- Sponsor / Asset Planning function must be part of the IDT to enable trade offs "within the tent"
- A clearly defined programme at the outset
- A thin client structure outside the IDT to assure performance

### How does it overcome existing issues?

- Releasing the programme and budget gives supply chain certainty of work and allows delivery of the programme to be structured to maximise efficiencies
- Encourages investment in innovation
- The IDT as a whole suffers the impact of waste / delays but are empowered to make the decisions

### Design responsibility

- Design responsibility would sit with the IDT underpinned by project level insurance and traditional type liabilities as a back up

### Commercial model

- Actual / defined cost paid
- Model tied to overall achievement of the outcomes with a programme level incentive
- Fee fixed at outset

### Incentivisation

- Overall programme level incentive albeit expectation is zero pain / gain as trade offs will be required
- Part of fee / cost subject to a small number of critical KPIs

### Tier 2 role

- Best athlete' approach whereby tier 2's / specialists could be directly engaged with Integrator oversight
- Facilitates social value through engaging local supply chains and SME's

## Appendix 2: Client-side ownership approach

### What is it?

- Client side develop the solution and hand across for detailing and construction
- Client retains most of the process / integration risk
- Applicable to all scales of work – with runways for work types and scale / complexity
- Direct delivery to tier 2 would be encompassed by this model as well as larger tier 1 type projects

### Innovation

- Due to the allocation of work on a piecemeal basis investment in innovation by the supply chain will be limited but performance ratchet may underpin a need for innovation

### How work is allocated?

- It could be competed under Frameworks to maintain competitive tension or,
- Direct award on a cab rank / performance / geographic basis in order to reduce mini-comp costs and increase efficiency

### When is the supply chain engaged?

- Late engagement - once the solution has been developed on the client side to reduce waste through the “tumble dryer effect”
- Meaningful ECI paid for on a PSC basic

### Key requirements

- Client-side capability to develop optimal solutions, programme manage and truly understand / define costs and risks
- Consistent and visible allocation of work to enable a production line approach

### How does it overcome existing issues?

- Benefit of client retaining control over programme and budget
- Avoids early engagement of supply chain when not ready to commence work
- Increased certainty and reduced risk for supply chain
- Enables the right supply chain for the work to be engaged directly by the water company

### Design responsibility

- Primary design liability will sit with the client (possibly outsourced to design house) as they develop the solution but elements may sit with the delivery vehicle who undertake detailed design

### Commercial model

- All existing models (target, lump etc) could be applicable but need to be simplified e.g. tendered rates / fees for P,L&M plus benchmark curves to show value

### Incentivisation

- Will be at work package level if target cost
- Element of fee / cost linked to a small set of KPIs

### Tier 2 role

- Tiers 2 would be the lead for smaller / simpler direct delivery type projects
- Facilitates social value through engaging local supply chains and SME's



## About the Water Industry Forum

The Water Industry Forum tackles challenges facing the UK water sector through thought leadership and facilitated collaborative working. It does this by providing a forum which is both independent and neutral, enabling multiple stakeholders to come together to share ideas and develop solutions.

The Water Industry Forum now operates as an independent subsidiary of British Water - a cross sector membership organisation which provides leadership, support and best practice for the UK water sector, and helps to address the challenges faced by the sector.

[www.britishwater.co.uk/page/WaterIndustryForum](http://www.britishwater.co.uk/page/WaterIndustryForum)

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