SRN56 Deliverability Technical Annex

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Executive Summary

Given the step change in investment in the water sector, Ofwat has requested that water companies' Boards review and provide assurance on their plans' deliverability. This technical annex contains the results of a study into our delivery capability and actions that we will be taking forward to ensure that the AMP8 business plan is deliverable.

We took a structured approach to satisfy Ofwat's deliverability requirement, following four key steps:

- a) Identified the **delivery challenges** faced by Southern and the water sector more broadly;
- b) identified a set of **delivery requirements** that need to be in place to address these challenges and derisk delivery;
- c) Reviewed our capability and capacity measures against these requirements; and
- d) Identified **priority actions** to address the gaps in our assessment.

The chapter structure follows this four-step approach, and key findings are summarised below:

- i. **Delivery challenges**: we have identified **seven sector wide challenges**, as well as challenges arising from our operating model. These include:
 - Supply market capacity will be stretched given the scale of investment. There will be intense competition for skilled labour and materials;
 - The significant scale of the water sectors' portfolio of works will be more complex; and
 - Sector-wide challenges are accentuated by recent challenges in our delivery performance, which is reflective of a lack of capability in certain areas of our business.
- ii. **Delivery requirements**: reflecting on these challenges and lessons learned from AMP 7 delivery, we summarised the key requirements into four areas, which we used to review the current and planned delivery measures we have in place.
- iii. **Review of delivery measures:** we established that we largely have a set of measures that will support the delivery of our PR24 plan, a number of which have been implemented as a result of our Turnaround plans and lessons learned from AMP7, including:
 - Implementation of our procurement and contracting strategy, which involves refreshed framework
 procurements aligned to our delivery needs (incl. the adoption of strategic delivery partners),
 proactive engagement and onboarding of suppliers (at least 12 months in advance of AMP 8), and
 supplier performance and relationship management that incentivises delivery of outcomes;
 - Focussing on preparing our procurement function for the challenge of increased use of our supply chain;
 - Strengthening of our operating model for capital delivery, with initiatives focussed on improving the
 efficiency of our Asset Lifecyle Process (ALP) and better prioritising and phasing investments,
 which will ultimately improve schedule certainty and cost control; and
 - Establishing alternative delivery routes where planned enhancements could better be delivered by third parties, which will enable us to share the burden of delivery.
- iv. **Priority projects**: the review has identified gaps in our current delivery capability, and we have developed a set of six priority actions to address, including:
 - Development of additional programme management and transformation capability, as well as establishing alternative delivery capability and processes;
 - Enhancing commercial capability to support the delivery of category plans for the supply chain;
 - Embedding a refreshed asset data strategy and approach; and
 - Develop a workforce plan focused on the capital delivery step-change.

When we account for a) the changes we have implemented in our Turnaround plans; b) the capability and capacity measures that are in place or being implemented in the business; and c) the priority actions which will be implemented from this deliverability review, we are confident that our business plan proposed for PR24 is deliverable, subject to the mitigations and regulatory approvals in this business plan.



1. Introduction

This document captures the steps we are taking to ensure our PR24 business plan is deliverable. This includes our assessment about our current ability to deliver, and the priority actions we need to take to address the specific challenges we are facing both internally at Southern Water and those impacting the water sector more broadly.

2. Our Approach

We acknowledge Ofwat's requirement for the business plan to be deliverable and have undertaken an exercise to provide confidence to both our Board and Ofwat. We started by assessing the key challenges that we are facing at Southern Water and in the water sector and determining what would be required to ensure these are addressed. This enabled us to review the measures we currently have in place, which highlighted a number of gaps that exist at Southern Water. As an outcome of this process, we have developed a set of six priority actions that we have committed to, to further de-risk the delivery of our business plan. Figure 1 illustrates the key steps we took in this process.

Figure 1: Summary of our approach to assessing deliverability



The structure of the technical annex follows this four-step approach.

3. Delivery Challenges

4.1 Our plan and performance

Reflecting on the delivery of our PR19 schemes, we have identified gaps and put corrective measures in place to improve our performance as evidenced in our AMP7 turnaround plans. A lack of capability in certain areas of our business (e.g. commercial and contract management, asset management, and portfolio planning) and operating inefficiencies have impacted past performance, and we recognise this as a challenge heading into AMP8.

Delivering the level of investment relative to AMP7, at an increased run rate, represents a significant step-up in required delivery capacity. This would be a challenge under normal business circumstances and is accentuated in the context of our previous delivery performance.

A summary of our planned wholesale expenditure by investment type is shown in the graphs below.



■ Base expenditure ■ Enhancement Wholesale (£m) Enhancement (£m) 8.000 4.500 51% 7,000 4,000 745 3,500 6,000 279% 3.000 5,000 2,500 4,000 1.559 2.000 3,000 1.500 2,000 3.832 1,000 3,288 1,507 1.000 500 AMP7 AMP8 AMP7 AMP8 (incl AltDel)

Figure 2: Cost of our AMP 7 and AMP 8 wholesale plans (corrected to 2022-23 prices)

Sources: AMP7, 2020-21 to 2021-22 are outturns as reported in Annual performance reports, adjusted to 20022-23 prices. AMP7, 2022-23 to 2024-25 are taken from PR24 business plan, tables CW1/CWW1. The values are net of grants and contributions and include third party services. AMP8 figures are sourced from PR24 business plan, tables CW1/CWW1, CW3/CWW3 and SUP12.

■ WINEP ■ WRMP ■ Resiliance ■ Others

The majority of growth in our investment levels will be driven by enhancements, which are required to meet statutory and regulatory obligations (as outlined by the EA, DEFRA, and Ofwat):

- Proposed PR24 enhancements will account for 56% of AMP8 wholesale costs, compared to only 23% in AMP7;
- Our Water Industry National Environment Plan (WINEP) is the largest in our history and consists of £1.5bn (in 2022-23 prices, including delivered in house and alternative delivery routes) of enhancements to tackle, among other key requirements, storm overflows and implement flow monitors;
- Water resource management plan (WRMP) enhancements account for £1.6bn (in 2022-23 prices, including delivered in house and alternative delivery routes), driven by new supply side improvements, strategic regional water resource plans, and supply and demand balance improvements.

The large number of WINEP and WRMP enhancements we need to deliver will require new technologies, skills, processes, and increased supply chain support, which adds further complexity to our plan delivery.

4.2 Sector-wide challenges

Our approach

Understanding challenges being faced by the water sector is important in considering the external forces that could impact delivery, and that we have the appropriate measures in place to overcome these. We undertook an assessment of the sector-wide challenges in three steps:

- 1. Reviewed a range of inputs to develop a long list of water sector challenges, including the following:
 - Historical performance of the sector (e.g., surveys);
 - Key learnings from non-fulfilment of plan commitments; and
 - Industry reports on AMP8 delivery (e.g., Water UK AMP 8 Deliverability).
- 2. Tested challenges with a targeted internal stakeholder group; and
- Prioritised key challenges.



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This process identified the key challenges in the table below:

Table 1: Overview of key challenges

| # | Key challenge | Description |
|---|--------------------------------------|--|
| 1 | Supply chain capability and capacity | Supply market capacity will be stretched given the level of AMP 8 investment and potential supplier attrition in the water sector given perceived lower returns relative to other sectors. |
| 2 | Plan stability | Continuous reiteration and rescoping of plans driven by regulatory requirements and other internal and external factors, for example the Green Recovery in AMP7, will hinder the water sectors' procurement processes and make scheduling less stable. |
| 3 | Competition for skilled labour | The significant increase in scale of AMP 8 and the introduction of new technologies and business models, will drive demand for resources, particularly specialist talent, against a backdrop of high industry churn and an ageing workforce. |
| 4 | Competition for materials | Competition for specialist materials and equipment across the water and other sectors is expected to intensify. |
| 5 | Portfolio complexity | The water sectors' portfolio of works will be more complex in AMP8, driven by a shift to novel solutions (e.g. nature-based solutions) and the growing interdependence between a larger programme of works and the complexity the increased capital delivery alongside both business transformation and stable operations. |
| 6 | Adapting to new business models | Water companies will need to manage different contractual requirements and approaches to project and programme management to maximise the benefits of using alternative delivery models, such as DPC. |

Further detail of these challenges and the measures that will be required are outlined below.

4.2.1 Supply chain capability and capacity

Overview

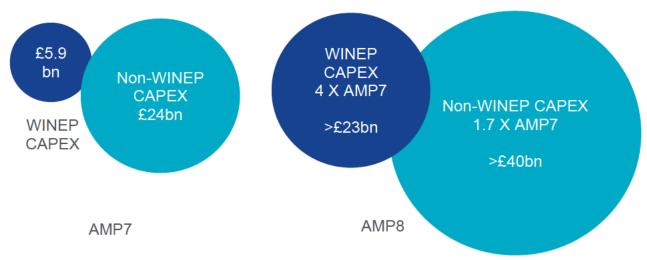
Supply market capacity will be stretched given the level of AMP 8 investment and potential supplier attrition in the water sector given perceived lower returns relative to other sectors.

Supplementary evidence

Total AMP8 investment for the water sector is expected to be around double that of AMP7 (see the figure below). Given significant capital programmes planned across sectors (water and sewage, transport, energy, and others), there are concerns regarding the supply chain's capability and capacity to meet rising demand.



Figure 3: Comparison of the industry capital expenditure for AMP7 vs AMP8 in 2017



Source: Based on Stantec's analysis, report for Water UK on AMP8 Deliverability

Since AMP5, acquisitions and administrations have resulted in a circa 50%1 reduction of the number of tier 1 contractors. This has reduced the number of supply chain partners available to Water companies to choose from and has created more bargaining power for suppliers. This could put a premium on their services and inflate the cost of delivery.

Macroeconomic factors such as the high inflation, rising interest rates, higher input prices, reduced travel, labour shortages, labour movement restrictions, and market fluctuations have also had a negative impact on the supply chain's operability.

In the decade between 2022-32 demand for construction in the UK is growing across other key infrastructure sectors, stretching the supply chain capacity further. Water and Sewage, with a CAGR of 3.2% over the next 10 years, will be competing for supply chain resources with other major sectors such as Energy and Transportation, both also with growth rates ~3% or above and forecast to be spending £15bn+ in 2032 on construction. The demand for construction across sectors is illustrated in the figure below.

¹ Stantec report for Water UK on AMP8 Deliverability, Phase 1&2 analysis – Final Report (early view of AMP8 data), page 48.



4% Water and Sewage Energy Chemicals 3% Transportation Health & Social 10-yr CAGR% (2022-2032) Retail Office 2% Other commercial Utilities Hotels & Restaurants Other institutional Food Processing Electrical & Electronic Transportation Equipment Communications 0% Education Other Industrial 9 £25 540 £45 550 Construction spend in 2032 in £bn

Figure 4: Construction growth in water sectors Vs others

Source: Based on Stantec's analysis, report for Water UK on AMP8 Deliverability; The chart above shows the growth in construction demand across sectors between 2022-32 using his Markit (S&P Global) data.

With the context of this competitive environment, contractors also perceive water companies as less profitable² to work with. This is compounded by attractive capital programmes like Tideway, Battersea power station, national grid, HS2 and the Heathrow expansion. These programmes have attracted and engaged supply chain partners, such as civils contractors, who would otherwise have been available to support the delivery of the AMP 8 programme of works.

Measures required to address challenge:

- A comprehensive supply chain strategy;
- Early engagement with suppliers; and
- A robust set of frameworks with access to appropriate capacity and capability.

4.2.2 Plan stability

Overview

Continuous reiteration and rescoping of plans driven by regulatory requirements, for example the Green Recovery in AMP7, will hinder the water sectors' procurement processes and make scheduling and execution less efficient.

² Stantec Report for Water UK on AMP8 Deliverability, Phase 1&2 analysis – Final Report (early view of AMP8 data), page 48.



Supplementary evidence

British Water³ has outlined that the short-term periodic nature of price controls contribute to continual reevaluation, reiteration, and rescoping of plans. Additionally, it cited that cyclical expenditure programmes make the water sector's procurement processes slow and adds multiple levels of approval and complex governance. This creates friction for suppliers and higher costs for customers.

A lack of visibility or frequent re-scoping of the commercial pipeline in a high demand environment (from other water companies and adjacent sectors) may negatively impact our relationships with our supply chain partners and their ability to allocate resources to meet our requirements. Further, if key suppliers remain cautious to demand and do not elevate production, it could constrain the entire market and challenge deliverability.

Measures required to address challenge:

- Early engagement with suppliers;
- An investment prioritisation plan;
- Robust processes and tools to manage the portfolio of work;
- A programme management framework; and
- A change control framework.

4.2.3 Competition for skilled labour

Overview

The significant increase in scale of AMP8 and the introduction of new technologies and business models, will drive demand for resources, particularly specialist talent, against a backdrop of high industry churn and an ageing workforce.

Supplementary evidence

In AMP8 we will see a greater deployment of nature-based solutions (e.g., wetlands, catchment solutions, natural flood management, SuDS), which will increase demand for specialist skills (e.g., surveying and investigation work, laboratory work, habitat assessment).

The ongoing digitisation of the water sector will contribute to the high demand for data analysts, data scientists and data engineers, where adjacent industry demand will limit availability. Adjacent industries will also limit the availability of asset management and project management experts to oversee the increased volume of work in AMP8. (By engaging them in capital programmes such as Tideway, Battersea power station, national grid, HS2, the Heathrow expansion and others.)⁴

⁴ Stantec report for Water UK on AMP8 Deliverability, Phase 1&2 analysis – Final Report (early view of AMP8 data), page 49.



³ British Water open letter to Ofwat, published in September 2022, page 3

With suppliers pulling out of the water sector or even failing⁵ (for example the collapse of Midas⁶ and Keltbray's acquisition of North Midland Construction (NMCN) ⁷, after NMCN was forced into administration in 2020⁸), there has been a significant drain of supplier talent. This attrition is made more acute by an aging workforce and a lack of tools available to upskill those entering the industry.

There is currently high¹⁰ employment in the UK and the water sector is constrained by its workforce delivering AMP7. Recruitment and training could take years¹¹ and the sector already faces a tough market. This affects both the water companies and its supply chain.

Measures required to address challenge:

- A comprehensive supply chain strategy;
- A talent acquisition and retention plan;
- A collaborative approach to working with supply chain partners; and
- A procurement plan that leverages the skills and knowledge of supply chain partners.

4.2.4 Competition for materials

Overview

Competition for specialist materials and equipment across the water and other sectors is expected to intensify and an inability to procure necessary materials (including chemicals) at the right quantities, time and price will impact deliverability.

Supplementary evidence

Macroeconomic pressures and supply chain disruptions resulting from COVID19, China's influence over the global supply chain, and the war in Ukraine, have already strained supplies in the UK and raised material costs. While this has resulted in increased stock piling across the sector, it is unlikely to be sufficient to meet the step change in investment or to fill the gap in specialist equipment and materials required, such as:

 Greater demand for laboratories: Lack of access to laboratories could impede biodiversity investigations;

⁵ Stantec report for Water UK on AMP8 Deliverability, Phase 1&2 analysis – Final Report (early view of AMP8 data), page 48.

 $^{^{6}\,\}underline{\text{https://www.constructionnews.co.uk/financial/administrations/midas-collapses-into-administration-09-02-2022/2002}$

⁷ https://www.keltbray.com/2021/10/11/keltbray-acquires-infrastructure-assets-from-nmcn-plc/

⁸ https://www.globalwaterintel.com/news/2021/40/uk-water-contractor-in-administration-as-losses-rise

¹º Office of national statistics, Labour market overview, UK: June 2023, https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/uklabourmarket/june2023 #:~:text=Main%20points,employees%20and%20self%2Demployed%20workers.

¹¹ Stantec report for Water UK, Working in collaboration with British Water, On AMP8 Deliverability, Phase 3 analysis – Final Report (early view of potential AMP8 supply chain capacity), page 19.

- High volume demand for multi-parameter sonde monitors: Lack of access to multi-parameter sonde monitors could obstruct the effective monitoring of water quality; or
- High volume demand for ferric sulphate: Lack of access to ferric sulphate could disrupt phosphorus removal from wastewater.

To combat this, Water UK recommends that water companies develop a critical equipment and materials framework¹².

An example of stressed supplies is the stringent global regulations for the disposal of contaminated water and how that is escalating the use of ferric sulphate. A compound used in the removal of phosphorous from wastewater¹³. However, there is concern around the capacity to produce ferric sulphate¹⁴. Growing demand of ferric sulphate in several end user sectors, including wastewater treatment, is anticipated to bolster the consumption rate in the coming years (see the figure below).

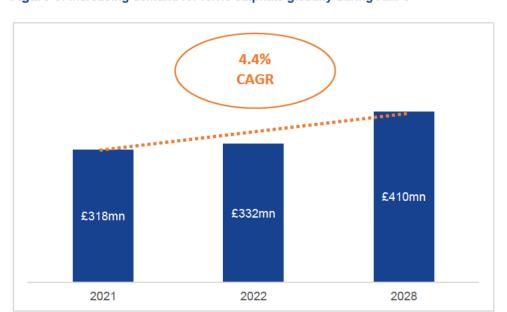


Figure 5: Increasing demand for ferric sulphate globally during AMP8

Source: Based on Stantec's analysis, report for Water UK on AMP8 DELIVERABILITY

Other pinch points and challenges for the deliverability of AMP8 include:

- Pilot trials to test the viability of new technologies in removing cypermethrin from wastewater;
- Alternate of solutions to dispose sludge to agricultural land, considering potential changes in government rules; and
- The supply chain's ability to deliver the unprecedented number of water quality monitors needed across the sector.

¹⁴ Stantec report for Water UK on AMP8 Deliverability, Phase 1&2 analysis – Final Report (early view of AMP8 data), page 43.



¹² Stantec report for Water UK, Working in collaboration with British Water, On AMP8 Deliverability, Phase 3 analysis – Final Report (early view of potential AMP8 supply chain capacity), page 28

¹³ https://www.ofwat.gov.uk/wp-content/uploads/2023/06/Water-Quality-Performance-Commitment-Review-Jacobs-Rev3.05.pdf, page i

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Measures required to address challenge:

- A comprehensive supply chain strategy;
- Early engagement with suppliers; and
- A capital and operational expenditure plan.

4.2.5 Portfolio complexity

Overview

The water sectors' portfolio of works will be more complex in AMP8, driven by a shift to novel solutions (e.g., nature-based solutions) and the growing interdependence between a larger programme of works and the complexity the increased capital delivery alongside both business transformation and stable operations. Further, as the frequency of extreme weather events increase due to climate change, water companies' attention may be required to divert to managing supply disruptions and incidents.

Supplementary evidence

The water sector's portfolio of works is expected to be more complicated between 2025-2030¹⁵, driven by a combination of a significant increase in volume (circa 2x for the sector) and type of work (e.g., complex enhancements that leverage new and novel technologies).

Multiple programmes of interconnected works will be running concurrently, with greater interdependencies between them and with supply chains. This will make the delivery of AMP8 investments complex and challenging to manage. The delivery portfolio challenge will be exacerbated by internal business change programmes that we will be implementing concurrently during AMP8 (e.g., the roll-out of our new ERP and CRM systems), as well as the need to continue to deliver on stable operations and base business concurrently with the step change in capital delivery.

The ongoing digitisation of the water sector may be challenged owing to the restricted supply of key components like water loggers, storm screens, monitoring devices, chips/micro-processors.

New and novel skills and technologies will be crucial to achieving companies' net zero ambitions. These range from nature-based solutions and net zero interventions to Artificial Intelligence (AI) and digital tools. However, as highlighted by British Water¹⁶, the regulatory setup of the water sector means water companies have not had to develop or deploy novel or new technologies at this pace or scale before. For example, to meet regulatory and statutory obligations, water companies have sometimes taken a more cautious approach to deploying new technologies. They have favoured existing techniques that provide greater certainty that investments will deliver benefits to customers and the environment. As referenced in the Water UK report on AMP8 Deliverability¹⁷, the slow deployment of advanced technologies and unclear technical standards will affect delivery, making stretching targets difficult to achieve.

¹⁷ Stantec report for Water UK on AMP8 Deliverability, Phase 1&2 analysis – Final Report (early view of AMP8 data), page 9.



¹⁵ Stantec report for Water UK on AMP8 Deliverability, Phase 1&2 analysis – Final Report (early view of AMP8 data), page 8.

¹⁶ British Water open letter to Ofwat, published in September 2022, page 4.

Operational incidents caused by extreme weather events have a devastating impact on aging infrastructure and can disrupt operations (e.g., the freeze-thaw incident of 2018¹⁸). As per the UK Met Office¹⁹, the UK is expected to experience more extreme weather events over the coming AMPs, owing to climate change. Resulting in frequent floods, droughts, coastal erosion, and other extreme events that could add another layer of complexity and challenge to the water companies' portfolio of works and impact deliverability. Especially as workforces and resources are redirected away from planned works to manage extreme weather-related operational incidents.

The delivery portfolio challenge will be exacerbated by internal business change programmes we will be implementing concurrently during AMP8 (e.g., the roll-out of our new ERP and CRM systems).

Measures required to address challenge:

- Early engagement with suppliers:
- Governance and performance management framework;
- Investment prioritisation plan;
- Programme management framework;
- Annual review cycle; and
- A procurement plan that leverages the skills and knowledge of supply chain partners.

4.2.6 Adapting to new business models

Overview

Water companies will need to manage different contractual requirements and approaches to project and programme management to maximise the benefits of using alternative delivery models, such as DPC.

Supplementary evidence

Direct Procurement for Customers (DPC) and alternative approaches (such as non-regulated or non-appointed routes) are expected to play an important role in AMP8 delivery. Regulatory guidance indicates that DPC can help promote innovation and resilience by allowing new participants to bring fresh ideas and approaches to the delivery of key projects.

However, this approach, alongside other non-traditional approaches to delivering the AMP 8 investments, are expected to add a layer of challenge to delivery, including complex contractual requirements, and a different approach to project and programme management.

¹⁹ https://www.metoffice.gov.uk/binaries/content/assets/metofficegovuk/pdf/research/ukcp/ukcp18 headline findings v4 aug22.pdf, page 7 and 8.



¹⁸ https://www.water.org.uk/news-views-publications/news/freeze-thaw-report-shows-water-industry-has-learned-lessons-winter#:~:text=winter%20of%202018-

[&]quot;Freeze%2Dthaw%20report%20shows%20that%20water%20industry%20has%20learned%20the,from%20the%20winter%20of%2020 18&text=UK%20water%20companies%20have%20learned,%2DThaw%202020%2D21'.

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While the new business models will encourage innovation and improve cost efficiency, we will need to manage complex contractual requirements and use a different approach to project and programme management²⁰ to ensure we maximise the benefits of using alternative approaches deliver.

Measures required to address challenge:

- A procurement framework that recognises Alternative Delivery;
- Specialist alternative delivery capability;
- A contract management plan;
- Programme management framework that recognises alternative delivery; and
- Risk and governance framework.

4.2.7 Cost pressure

Overview

Economic forces will likely cause more volatile and inflated costs for water companies and could put pressure on supply chain partners to maintain margins.

Supplementary evidence

High interest rates, inflation, and high commodity prices are already negatively affecting construction activity and UK suppliers²¹ (particularly those who import raw materials, such as plastic pipes, as is the case in the water sector). If the water sector's demand exceeds the supply chain's capacity, there will be additional inflationary pressures. While in the long run this may attract more resources into the supply side to recover equilibrium, in the short run it will stress deliverability.

The risk of economic pressures, particularly high inflation, interest rates, a possible recession and volatile prices have the potential to increase costs for the water companies. The increased costs lead to rephasing, rescoping and new optioneering of the portfolio and can impact deliverability. This can reduce companies' profitability and squeezing supply chain partners (who may not have the headroom to absorb higher costs). Whilst regulatory mechanisms exist to manage external challenges such as inflationary pressures, the reality of the timing and magnitude of these adjustments mean that there are still impacts to intra-AMP deliverability.

Measures required to address challenge:

- Early engagement with suppliers;
- Investment prioritisation plan;
- Risk and governance framework;
- Annual review cycle; and
- A collaborative approach to working with supply chain partners.

²¹ Stantec report for Water UK, Working in collaboration with British Water, On AMP8 Deliverability, Phase 3 analysis – Final Report (early view of potential AMP8 supply chain capacity), page 14 and 19.



²⁰ https://www.ofwat.gov.uk/wp-content/uploads/2023/04/DPC-Technical-discreteness-guidance.pdf

4. Delivery Requirements

Summary of requirements

We have reflected on both the sector-wide challenges and our internal challenges at Southern Water, as well as on best practice delivery at Southern Water and elsewhere, and identified a set of requirements and specific measures that need to be in place to address these challenges and de-risk overall delivery. These requirements can be summarised into four key dimensions:

- Supply chain strategy: Does SWS have a strong set of framework agreements and supplier
 relationships to provide capacity and capability, and managing it on an ongoing basis with evaluation
 based on reviewing 7 specific measures such as strategy, category planning and governance and
 performance;
- 2. Portfolio execution plan: Does SWS A well-defined planning process at the portfolio, programme and project level, with appropriate collaboration across the business based on reviewing 4 specific measures including investment prioritisation and capex/opex planning;
- 3. Portfolio delivery and performance management: How well does SWS track and manage delivery performance, efficient delivery processes, and prioritisation of works considering 8 specific measures including programme management, change control and risk and governance; and
- 4. Strategic workforce plan: How effective is SWS at Identifying, sourcing, retaining and training the right resources and capabilities, at the right time for the right work considering 3 measures related to capability planning, resourcing and training.

The figure below provides a summary of what these requirements include and the extent to which each of the requirements addresses the specific challenges identified in the previous section. This emphasises the criticality of having a strong supply chain strategy in place.



Figure 6: Requirements for successful delivery

| | | Supply chain strategy | Portfolio execution plan | Portfolio delivery and performance management | Strategic workforce plan |
|----------------------|-----------------------------------|---|--|--|--|
| Requirements | | Strong set of framework agreements and supplier relationships to provide capacity and capability, and managing it on an ongoing basis | A well-defined planning process at the portfolio, programme and project level, with appropriate collaboration across the business | Tracking and managing delivery performance, efficient delivery processes, and prioritisation of works | Identifying, sourcing, retaining and training the right resources and capabilities, at the right time for the right work |
| Specific measures | | Informed strategy Supplier agreements Delivery partners Supplier capability and capacity Supplier relationships Category management Governance and performance management | Investment prioritisation Planning process Capex planning Opex planning | Capital investment delivery planning Execution tools and processes Investment prioritisation Programme management Risk and governance Change control Plan review | Capability planning Resourcing Training and upskilling needs |
| | Supply capability and capacity | | | | |
| _ | Plan stability and certainty | | | | |
| ressec | Competition for skilled workforce | | | | |
| Challenges addressed | Competition for materials | | | | |
| Shallen | Portfolio complexity | | | | |
| 0 | New business models | | | | |
| | Cost management | | | | |

5. Review of Deliverability Measures

We have reflected on the strength and completeness of the measures that we currently have in place against each of the four key deliverability requirements. Below is a summary of the maturity of these measures, which include a combination of existing business measures that have been newly introduced during AMP7 as a result of the lessons learned and other measures that we have committed to implementing prior to and during AMP8.



Figure 7: Summary of our measures against the core deliverability dimensions

| Competency | Maturity ^[1] | Commentary |
|---|-------------------------|---|
| Supply chain strategy | High / Medium | We are implementing our new procurement and contracting strategy that incorporates key learnings from AMP7 delivery and the evolving market landscape, involving: New framework agreements that are tailored to our AMP8 delivery needs Early engagement and assessment of our suppliers to validate supply chain capability and capacity to deliver Early onboarding of suppliers (12 months prior to commencement of AMP8), bringing them into the early phases of capital projects (scoping) to provide stability in our pipeline Ongoing supplier performance and relationship management that incentivises delivery of outcomes We are undertaking active category management to capitalise on supply chain opportunities and mitigate risks such as long-lead items, while taking into consideration both the widersector and adjacent sector needs that impact our supply chain While we have comprehensive measures in place, we will strengthen our supply chain strategy further through more thorough category management, including validation of supplier capacity to deliver and any associated supply chain risks, supplemented by improved capability in commercial and contract management |
| Portfolio execution plan | Medium | We will undertake a translation of our business plan into detailed execution plans that drives our delivery schedule Our Capex Investment Programme Planning (CIPP) process will be used to plan and forecast the commencement or release of defined Capex tranches / projects within the approved execution plan In preparing our AMP8 BP, we have taken a rational view to prioritise investment to maximise the benefit to our environment and our customers, while still making the plan deliverable and affordable. For example, we have proposed to the EA that £900 million of WINEP investment could be delivered over 8 years instead of 5 years, phasing this spend into AMP9 and we are working with our regulators to conclude this discussion While we have these defined processes and measures in place, we do not currently have a fully consolidated view of our programme execution plan, as these are currently decentralised in respective teams (i.e., specific execution plans for specific delivery teams only) |
| Portfolio delivery and performance management | Medium | Our robust Asset Lifecycle Process (ALP), which has further planned improvements prior to the commencement of AMP8, encourages fast decision-making and brings our suppliers into the process to provide stability in project scope Our tools provide us with clear visibility of our investment schedule, which is supported and influenced by our prioritisation and change processes We maintain PMO capabilities across parts of our business to support delivery and continuously track our performance and measure it against plans We undertake an annual review of our business plan to understand emerging risks and adjust our baseline We recognise improvements are still required to address the following: How execution across delivery teams is brought together (particularly dependency management) The reactive approach to scheduling, performance management, and prioritisation of investments |
| Strategic workforce plan | Medium / Low | We have undertaken some strategic workforce planning for AMP8, which we acknowledge is critical to support the delivery of our committed investments We need to further build a view of what our full future workforce capability and capacity need to look like to support our business plan, including detailed requirements of skills and capabilities, total FTE, workforce mix (in-house vs outsource), and training and development |

^[1] Maturity definitions

High – High level of measures in place to support deliverability or already planned to occur prior to AMP8
 Medium – Moderate measures in place to support deliverability or already planned to occur prior to AMP8
 Low – Low level of measures in place to support deliverability



There are some overarching actions within our Turnaround Plan (2023-25)²² which have also increased our delivery capability, captured below:

- Funding to secure financial resilience Shareholder backing has enabled both financial resilience and an investment to accelerate improvements in operational performance: This phase is broadly complete and on target to finish by the end of 2023. A further £550 million of equity is being injected into the group in 2023 along with a commitment of no dividends from Southern Water Services for the remainder of AMP7. These are to manage the impact of the high inflation and interest rate environment on our operating, maintenance, and funding costs, and to maintain our momentum;
- Renewing management: As part of our Turnaround Plan, we have created a new Executive
 management team, with skills and experience from inside and outside the industry. We have refreshed
 senior leadership across our businesses, with a replacement of 35% of roles. We have also refocused
 our organisational structure with a Managing Director for Wastewater and separate Managing Director
 for Water with high profile experienced capital delivery directors in both functions and have created a
 central Transformation Office, with transformation and change teams in each of our business units;
- Scaling up procurement and our supply chain: We have focused on preparing our procurement function for the challenge of increased use of our supply chain;
- Taking a rational view of future requirements and phasing: In preparing our AMP8 business plan, we have taken a rational view to prioritise investment to maximise the benefit to our environment and our customers, while still making the plan deliverable. For example, we have proposed to our regulators that £725 million of WINEP investment could be delivered over 8 years instead of 5 years, phasing this spend into AMP9. We are working with our regulators ahead of a decision; and
- Planning for Alternative Delivery: Further, we have recognised that some of the planned enhancements could be better delivered by third parties. Our plans for Alternative Delivery enable us to share the burden of delivery with other parties. These plans need to be agreed with Ofwat.

With financial support, we have increased our capabilities to deliver increased output. We have increased investment in capital maintenance, recognising the short-term need for investment and the challenge we will face from 2025.

Given this investment focus, we are already increasing our delivering investment on a scale needed to fulfil our AMP8 plan, as shown in the figures below.



²² 6579_ofwat_company_turnaround_plan.pdf (southernwater.co.uk)

Net Totex Capex Opex 1,800 1,200 600 1.076 512 1.532 507 500 459 1.337 877 62 63 1,400 400 1.067 636 892 1.000 452 229 244 659 600 300 238 624 404 600 400 200 221 422 613 404 100 575 200 200 169 200 389 229 23/24 8 AMP8 Y1 AMP8 Y2 23/24 & AMP8 Y1 AMP8 Y2 23/24 & AMP8 Y1 AMP8 Y2 ■ Water ■ Waste ■ Retail ■ Water ■ Waste ■ Retail ■ Water ■ Waste ■ Retail

Figure 8: Annual investment run-rate (totex, capex and opex) in AMP7 and projected into AMP83

Source: Southern Water analysis.

From AMP7, the growth in the plan is significant. Wholesale totex increases by 61%, AMP on AMP, while enhancement totex increases by 198%. We have been increasing our capacity and delivery in the last few years, which reduces the increase in annual investment spend to c.25%, between the end of AMP7 and the start of AMP8. A similar increase in investment spending was achieved between the beginning and end of AMP7. This demonstrates our ability to manage the step-change in delivery.

AMP8 represents an unprecedented level of investment. However, having demonstrated previously the ability to increase investment spending between the start of AMP7 and the end of AMP7, at similar rates of increase to those required to start AMP8, we have proven that we can increase investment at the levels of intensity needed from 2025. Therefore, we are confident we can deliver our plan, subject to the mitigations and regulatory approvals described in this plan.

The section below describes in more detail the measures in place against more detailed sub-requirements.

1. Supply Chain Strategy

Given the current and emerging challenges we are facing in the water sector, securing the capability and capacity in our supply chain is critical to the deliverability, and thus success, of our PR24 business plan. To navigate the challenging delivery environment, we have developed a supply chain strategy within the scope of our AMP8 plan and beyond, that outlines:

- How we are procuring and contracting for services to enable us to secure the best solutions and outcomes for both existing and future work;
- How we are managing and optimising our category spend based on the contract landscape; and
- What we will do throughout delivery to ensure supplier relationships and performance is managed on an ongoing basis to ensure our outcomes are achieved.

This subsection outlines the details of the current measures we have put in place with respect to our Supply Chain Strategy.

| # | Action | Commentary |
|---|--|---|
| 1 | Supplier agreements We have developed new framework procurements aligned to the scope of AMP8 that have been | New framework contracts Our operating model relies upon effective contracts for Capital Delivery, Engineering and Asset Management Advice, and Repair & Maintenance services. New frameworks or contracts are required given the current frameworks for these capabilities expire in March 2025 as well as the following: • |



informed by extensive market engagement, analysis of the sector, and the wider infrastructure market

The rationale and overview for each of our new framework that we are currently procuring for AMP8 (see action #3 for timelines), are set out below across three core requirements.

Requirement #1: Capital Programmes

To accommodate the challenges of pipeline uncertainty, commercial arrangements will be agreed for AMP8 Capital Delivery, achieved through call-offs in the form of works contracts (with project or programme specific options) as projects are agreed. Market analysis, and our experience, is that some diversity in the suppliers would be beneficial to cope with the different scales and project types. We have established two Capital Programme packages, as follows.

- Strategic Delivery Partners: We are seeking at least three Strategic Delivery Partners (SDP) working
 across the Asset Lifecycle Process (ALP), involving them as early as possible in the value chain, and
 incentivising them to deliver outcomes for significant tranches of work; and
- Low Complexity Delivery Route: We are seeking suppliers focused on infrastructure design and build
 projects the Low Complexity Delivery Route (LCDR) for Infrastructure. (A parallel framework has recently
 been awarded for Non-Infrastructure.) The LCDR will be further split into two lots Water and Wastewater
 with opportunities to contract across lots.

Requirement #2: Professional Services

The requirement for professional advice covers both routine and ad-hoc requirements, spanning project management and controls, asset management, and related technical advisory capabilities. There is an opportunity for us to further build our own in-house capabilities and capacity, using bought-in help for surges in demand as well as for ad-hoc needs, but this needs to be founded on a stable known programme of work emerging from PR24.

Requirement #3: Network Services

The repair and maintenance (R&M) provision includes routine inspection, test, and maintenance, but will also need to handle emergent repairs, and have the option of calling-off additional services if funds are available to invest (e.g., preventative maintenance). It will include leakage detection and control, and developer services.

Other areas of spend

In addition to the Non-Infrastructure LCDR framework which has been let in 2023 and extends into AMP 8, we have other equipment and operational site services contracts which complement the new AMP 8 frameworks outlined above, and will support the resilience of the supply chain to deliver the AMP 8 programme

2 Delivery partners

We are establishing sufficient depth and breadth of delivery partners, which will reduce the risk to delivery schedule that may arise in our supply chain due to capacity constraints and create a healthy level of competition that will drive supplier performance

Packaging and lotting of our frameworks

Our framework requirements have been packaged and lotted to secure the best competition from the suppliers with the capability and capacity to deliver the services to us. The frameworks have flexibility to provide greater resilience, allowing works to be allocated to best meet business requirements.

Agreeing the essential requirements and commercial terms in the frameworks simplifies the call-off process and will improve supplier participation in mini-competitions where they are needed.

Capital Programmes lotting

- A procurement package for Major Projects, with lots for a Strategic Delivery Partner (SDP) for Water, Wastewater and Infrastructure and a separate Infrastructure Low Complexity Delivery Route (LCDR) framework with lots for Water and Wastewater,
- The SDP will engage across the whole ALP cycle, where there are high degrees of uncertainty, risk, or scale of programme (e.g., WINEP);
- LCDR providers will carry out routine/straightforward design and build only (e.g., mains replacement)
- It is anticipated that there will be several SDP's appointed, based on the nature of the programme e.g.,
 SDP for the delivery of the Nutrient Removal Programme; and
- Each of the lots will have call-off mechanisms, and incentivisation, appropriate to the scale whether medium or major projects, and for the defined programmes.

Professional Services

- Lots for Asset Management, Project and Programme Management, and for Technical / Engineering and Design: and
- These will be called off as specific projects / tasks as the primary route but maintain the option of resource augmentation for flex bility.



Networks

- Water Supply & Distribution will have two lots: Repair & Maintenance; and Developer Services connections; and
- Wastewater Networks will have three components: Operate & Maintenance; Civils and Rehab; and Manhole Covers

Supplier capability and capacity

We are developing a deep understanding of who our potential suppliers are and gain early indication of their capability and capacity to deliver our investment commitments

Procurement process timeline

Our frameworks exceed the value thresholds to require open market competition according to the Utilities Contract Regulations (UCR). At SWS, we require the option, although we may not use it, to negotiate with tenderers on their offers. As such, we are following a Negotiated Procedure, with prior call for competition.

We commenced our procurement process for AMP8 in February 2023, which follows the below stages:

- Market engagement event to explain our priorities, undertake a market review, and gain feedback from suppliers on our design drafts:
- 2. Prior Information Notice (PIN) to advertise the opportunity for each framework package;
- 3. Pre-Qualification Questionnaire (PQQ) to pre-qualify the market;
- 4. Invitation to Tender (ITT) to secure offers; and
- 5 Contract Award

| Q | 2 22 | Q3 22 | Q4 22 | Q1 23 | Q2 23 | Q3 23 | Q4 23 | Q1 24 |
|---|----------|---------------------------------|-------|---------------------|---------------------------|---------------------------|-------|-----------------------|
| 0 | Discover | Design | | | Procure | | | |
| | | Procurement Contracting Stra | | Market ngagement | PQQ release Apr/May 23 | ITT release Aug/Sep 23 | | Frameworks Awarded |

Market engagement

A market engagement event was held in February 2023 to outline our vision and the strategy to the market. It provided an explanation of the procurement, including the scope, scale, timelines, and the vision for the new arrangements. The format included a formal briefing, led by members of the Executive Team, followed by Teams meetings to provide further feedback for each framework, and answers were issued in response to the feedback and comments from prospective suppliers.

In March 2023, the draft document set was shared, inviting comments and questions. This was used to inform and refine the tender packs and lotting decisions. The market engagement stimulated a healthy level of competition and aims to reduce the volume of clarification questions during the tendering process.

Pre-Qualification Questionnaire (PQQ) stage

The AMP8 procurements are currently in the PQQ stage of the procurement process, whereby work packages have been advertised to the market using a Prior Information Notice (PIN). The PQQ is limited to essential pass / fail criteria (e.g., financial health) and aims to confirm supplier capability and capacity to deliver the services required, through simple case studies.

The networks frameworks were released shortly after the other frameworks and PQQ responses were received on 28 July.

Invitation to Tender (ITT) stage

A set of suppliers are to be invited to progress to the ITT stage of the process which will set out the detailed requirements of response and provide the draft agreement for each package of work. During this process, we will obtain a more comprehensive understanding of supplier capability and capacity to deliver and to flesh out specific supply chain requirements to provide us with greater confidence on deliverability.

Evaluators for this process will be trained in advance and help set the requirements of response (linked with critical success factors). Evaluation will therefore not just be focussed on price, but the quality of responses in promoting our priorities (incl. delivery effectiveness and efficiency). Evaluators we therefore be familiar with what is being sought. The process will include individual initial scoring, before group moderation and consensus recording.

An evaluation report will be written, recommending the outcome of the process for each procurement, and presented to the Procurement Review Board (PRB) for endorsement and agreement to move to contract.

Contract award

The approval process will follow our existing process, ensuring that contract awarding aligns with other procurements throughout the organisation.



Supplier relationships

Frameworks will be in place 12 months prior to the commencement of AMP8, enabling us to build strong relationships with our suppliers and involve them in early scoping and assessment of projects

Contract award and standstill commencement could then be undertaken, with the procurement process taking no more than 220 days in total. It is the aim that we reduce the time to contract award wherever possible.

Proactive supplier onboarding

We are taking a proactive approach to the procurement process to ensure we have all required frameworks in place at least 12 months in advance of the commencement of AMP8. This will allow for a smooth transition from legacy agreements and ramp up of full operating capability of new suppliers prior to commencement of AMP.

Early scoping and assessment

We will be involving our SDPs and Professional Services advisors in early scoping and assessment of projects to ensure there is better estimating of site condition and likely costs. This will help to mitigate the risk of later scope changes and price inflation. The intention is to expedite the design and build stages of the ALP, free-up in-house capacity, and ultimately make the process more efficient. While this will be most impactful for major projects, there is still value in taking this proactive approach to all work packages.

Early contractor involvement with our SDPs, and more broadly with the market during the procurement process, will help to build market appetite for our planned projects, create a better understanding of realistic affordability, help us to better understand the market's appetite for risk and reward, and give us access to data that will help to determine the health of the supply chain during the current economic uncertainty.

Integrated teams

We will also continue to leverage our 'Integrated Teams', which was a concept introduced for AMP7, who oversee the Asset Lifecyle Process (ALP) for capital investments. This is a cross-functional SWS team managed by the Project Manager, also consisting of consultants, contractors, and specialist suppliers. The enduser (operations) is involved from the very start. This team will enable earlier supply chain engagement, leading to aligned outcomes and improved design innovation. The team culture is characterised by openness, clearly understood mutual objectives, problem solving, a commitment to continuous improvement (measured against KPIs) and mechanisms for managing risks and sharing rewards. This will ensure our suppliers are well-informed and move along the journey with us.

5 Category management

We regularly update our category plans in alignment with our frameworks, ensuring we can capitalise on opportunities and identify and mitigate any risk to delivery

Category planning

Category planning is a strategic approach to procurement whereby we group together and manage similar areas of external spend (e.g., operational services). This includes identifying, analysing, and prioritising opportunities to optimise the value and performance of our spend categories.

We are in the process of developing category plans for each of our frameworks, with category managers in place to drive active development of the plans and the category strategy through the procurement team. We regard our category plans as 'live' documents which are continually updated based on emerging information and are formally reviewed on a quarterly cycle to ensure categories are always relevant and in keeping with our overall strategy.

A detailed analysis of asset supply requirements has been completed for AMP7 and this is contributing to the ongoing development of category strategies which are aligned to the frameworks we are currently procuring. While the specific technical requirements for AMP8 are to be worked through in detail (e.g., detailed asset design), as part of our AMP8 Procurement & Supply Chain Strategy, we have taken into consideration lessons learnt from AMP7 and the likely size and shape of the programme for AMP8. Additionally, in readiness for AMP8 delivery, we are developing a logistics hub which will provide the capability for SWS to procure, store and free issue long lead-time components to the supply chain (e.g., stocks of Programmable Logic Controllers (PLC) and other difficult to source electronic components).

For major projects which are already well-understood at this stage, we are developing procurement strategies which incorporate analysis of long-lead time items (e.g., pipe and large valves and pumps).

Identifying risks and opportunities

To supplement our category planning process, we will continue to operate our Integrated Supply Chain Group (ISCG) with our Tier 1 partners, which is an initiative that has been in place throughout the delivery of AMP7. The primary role of this group is to identify risks and opportunities in the supply chain.

The ISCG has developed an initial consolidated list of equipment requirements for AMP8 which identifies where we already have frameworks in place, showing that in most cases we do already have frameworks in place or at least procurement is in-flight for these frameworks.

The ISCG will continue to operate with our new supply chain partners for AMP8 and review the framework requirements with existing and new framework partners. This will ensure that supply frameworks are in place with suitable capacity to deliver the forecast programme of work.

6 Informed strategy

We have sought wider sector feedback and market insight to inform our supply chain strategy, including engagement with water sector peers and other utilities and infrastructure organisations, as well a range of organisations in other sectors such as natural resources, hi-tech / digital, financial services oil and gas, mining,



Our Procurement and Contracting Strategy has considered wider sector needs and its impact on supplier capacity and appetite to work with us and retail. Engagement with incumbent suppliers, in the form of interviews and Requests For Information (RFI), have also been made.

These activities have helped to identify the key procurement and supply chain challenges being faced and to assess the impact of alternative delivery models with suppliers. This has been influential in our decision to adopt the SDP model and to inform other key strategic supply decisions (e.g., supplier incentive mechanisms, the number of suppliers sought for each framework). At a macro scale, we do not expect there to be any further market insight at this stage that will fundamentally change the composition of our strategy.

7 Governance and Performance Management

Our refreshed procurement governance will ensure we stay in control of our supply chain throughout delivery and beyond, leveraging performance management data to drive supplier standards and facilitate decisionmaking

Procurement governance

To ensure successful delivery, we will be maintaining strong relationships between our Procurement and Commercial teams, and utilising relevant data for monitoring and to inform decision-making.

This will be achieved through two key governance forums:

- The Programme Review Board (PRB) and Procurement & Contracts Board (PCB): Meets monthly
 and sets the direction, make decisions, and are informed about progress, generally providing review and
 scrutiny of the procurement programme; and
- The Programme Management Office (PMO): Provides programme management across all frameworks, including planning and scheduling, reporting and preparation for PRBs, risk and issues management, benefits tracking, change management and lessons learned

Our nominated Executive Directors currently sponsor each of the procurements and their teams are developing the framework requirements. Our Procurement and Commercial teams are leading the procurement process with dedicated Procurement Leads assigned to each of framework.

Balanced Scorecard

To drive supplier performance, we are anchoring our strategic ambitions to our Balanced Scorecard, which will give our supply chain clear direction as to our business priorities, so that they can contribute towards them. Our Balanced Scorecard is built in logical layers, from our vision and mission to strategic themes and Critical Success Factors (CSFs).

We received broad support of the scorecard and desire to see more detail during the formal engagement event with suppliers in February (the latter has been addressed through the sharing of draft schedules and use of the top half of the scorecard in draft agreements with potential suppliers).

The Balanced Scorecard is core to our thinking on measuring future performance and in evaluating tenders. The priorities expressed within it will apply to all frameworks, although the balance of weighting will be adjusted according to the services required. Work is still ongoing to refine the specifics of supplier KPIs and targets, which will be finalised in advance of the tendering stage (ITT). There will be a mixture of consistent KPIs and tailored KPIs, both types reflecting the relevant measures for each of the balanced scorecard elements. The former will enable us to compare supplier performance against scorecard themes across different service types and help with supplier awards and celebrating success.

We will embed the scorecard into our supply chain agreements so that suppliers can contribute towards our priorities and help deliver the anticipated benefits. Under each CSF will sit the policies and standards and will be considered as part of the requirements of response in a tender, and the associated evaluation criteria. Each will also have KPIs to drive performance and reporting in contract.

Incentive mechanisms

We are currently finalising our incentive mechanisms with a focus on target project costs – using a target cost contract with our activity schedule, where the out-turn financial risks are shared between us and the supplier in an agreed proportion.

A variable fee mechanism has already been shared with potential suppliers during early engagement of the procurement process and there has been no pushback on our proposal. Scope and schedule performance will also be built into all call-off contracts to ensure suppliers deliver on their commitments.

Length of agreements

The length of our framework agreements with suppliers will be linked to performance, and provide the flexibility to extend, meaning they can reach beyond AMP8. To achieve this, frameworks will be let based on a 5- or 7-year initial term, with a series of 1-year extensions available for flexibility. This will introduce new competition mid-AMP9, disaggregate the procurements from the PR process, and further incentivise delivery performance.



In addition to the above measures, we also have three planned system upgrades as part of our PR24 submission. These planned upgrades will improve our contract lifecycle management, involving more automated solutions with reduced processing times and the ability to pay key delivery partners efficiently. These upgrades will provide further stability with our supply chain and ensure strong relationships with our suppliers are developed and maintained.

2. Portfolio Execution Plan

To drive effective delivery of the business plan, we will translate it into executable plans for different delivery areas. Clear processes will be fundamental in helping us to prioritise our investments and review our scope, spend (both Capex and Opex), and schedule. Developing an execution plan and being transparent with our supply chain as early as possible is critical to providing stability and alignment in our pipeline.

This subsection outlines the details of the current measures we have put in place to ensure we have a defined portfolio execution plan.

| | Measure | Description |
|-----|---|---|
| 2.1 | Initial scoping As part of our optioneering process in the development of our PR24 business plan, we developed initial scope assumptions to the extent that was possible depending on project maturity to inform our cost estimations | We have undertaken an optioneering process to help identify preferred solutions from a series of potential options. We balanced criteria of improved resilience, customer and stakeholder benefit, environmental impact, wider societal and economic benefit, and customer affordability in the short, medium, and long term. Our optioneering process is governed by our Decision-Making Framework, which allows us to develop, compare and prioritise options and schemes across the PR24 wholesale programme on a common basis. This enables us to manage the process of optioneering from a scheme perspective as well from the viewpoint of the wholesale plan and how our various solutions work together. This process reduces the risk of any elements of scope being missed during early stages of costing and will contr bute to improved plan stability during detailed planning and delivery. |
| 2.2 | Planning process We translate our business plan into a detailed programme of work that drives our delivery schedule | We follow a defined process of developing targeted execution plans for individual delivery areas. Our finalised business plan is shared with Engineering & Construction (E&C) and operations teams to collaboratively translate it into a defined schedule of work. The AMP baseline is developed, and defined execution plans are outlined for each of the key areas. The baseline work is split into in-flight work and yet-to-start work. In-flight work is categorised as being in delivery with a dedicated PMO stood up for support. Yet-to-start work will go through our Capital Investment Programme Planning Process (CIPP). |
| 2.3 | Capital programme scheduling Our capital programme planning is managed through our defined Capex Investment Programme Planning (CIPP) process | The CIPP process aims to support project sponsors (on an ongoing monthly basis) in capturing a forecast look ahead (cost and schedule) of Capex interventions which are yet to start. It is supported by the execution plan and provides a defined and connected process structure for us to follow in determining capital allocation. Planning considerations within CIPP process are based on priority (as per the execution plan), as well as on any emerging needs identified between annual planning cycles via our emerging needs process. The CIPP process provides a systemised view of the release of capital interventions from the project Sponsor (vs the Execution Plan) and informs governance forums and other key stakeholders. It provides visibility of the pipeline of promoted needs and allows to consider resourcing requirements and delivery considerations. |
| 2.4 | Opex planning We have an operating expenditure forecast methodology to plan for expected spend based on the scope of work and allowing for contingencies | We followed a dedicated methodology of defining expected operating expenditure for AMP8: This involved reviewing our past performance over AMP7 with a particular focus on year 5 of the period to understand base spend for the previous level of activities; We applied an inflationary increment set by Ofwat to account for expected increases in the price levels. We also investigate individual areas to understand specific inclusions and exclusions that may be required given new level of activities; We analysed the potential risk landscape and particular areas of uncertainty. This allows us to build in a risk adjustment for potential contingencies; and Additional considerations for further planning and resource requirements are conducted on a needs case basis for specific areas to support more accurate estimation of the forecasted operating expenses. |



3. Portfolio delivery and performance management

Delivery of the portfolio of works (across Capital Delivery, Alternative Delivery, operations, internal change) etc) will rely on a strong and effective PMO with the appropriate tools and process and also strong project management capability. Given the size and complexity of our capital programmes, and the intensifying focus on ensuring deliverability, we have strengthened our mechanism for delivering capital investments.

This subsection outlines the details of the current measures we have put in place to ensure we deliver our portfolio execution plan and manage performance appropriately.

| | Measure | Description |
|-----|--|---|
| 3.1 | Capital investment delivery processes Our Asset Lifecycle Process (ALP) will support efficient capital investment delivery, driven by our Risk & Value (R&V) mechanism and Investment Decisions (ID) to ensure projects move efficiently from planning through to delivery | We will follow our ALP to deliver our capital investments through typical delivery partner routes. The ALP process guides us in planning, designing, building, operating maintaining, and decommissioning of our assets. It also provides us with a framework to make effective decisions around risks, Totex, and outcomes. Our ALP is governed by five Investment decision points, which enable early decision making and prevent lengthy design phases and rework. To ensure the process is tailored to each project and allows for projects with lower complexity scope to move quicker through the process, we have a Project Categorisation model that determines which specific R&V processes and IDs must be followed based on the complexity of work scope and residual risk to the business (if the project fails). R&V checkpoints act as technical milestones to support the ID points. Overall, our R&V process helps to deliver the best value for money regarding Totex and Whole Life Cost for us, our customers, and our stakeholders. This process ensures greater pipeline stability which will in turn give confidence to our supply chain, allowing them to better optimise delivery given the level of certainty in scope and schedule. |
| 3.2 | Efficiency initiatives We are implementing initiatives that will accelerate the speed at which projects move through our ALP | While our ALP is robust, we acknowledge that opportunities exist to improve the way in which we operate our processes across the asset lifecycle, particularly during the earlier design stages. Based on a comprehensive review, we have designed a set of efficiency initiatives that will be in place during the later stages of AMP 7 and throughout AMP 8. These initiatives will accelerate the speed at which projects move through the ALP and ultimately improve the level of certainty in our schedule, while freeing up internal capability and capacity that was previously tied up in longer design phases. Accountability and collaboration initiative This is focussed on driving behaviours in key roles to enable and empower the core members of our integrated teams to deliver aligned outcomes and improved design innovation. This will involve: Clarity on who is accountable and who is responsible for business cases to create a robust, long-term view; Holistic decision-making considering SWS corporate objectives, long-term considerations, and a tranche and/ or programme level view; Integrated teams that connect and communicate in a coordinated way, driven by the critical role of assigned Operations Managers in the end-to-end process from risk assessment and business case development to optioneering, delivery, and handover (fewer hand-offs); and Optimised support, process, and controls to achieve SWS strategic objectives and R&V, driven by an assurance function and driving achievement of excellence. Continuous improvement roadmap initiative This initiative is focussed on acknowledging improvements identified by SWS colleagues who are involved in the ALP and R&V processes and ID points on a day-to-day basis and engaging them in defining solutions. |
| 3.3 | Investment prioritisation We are introducing a new prioritisation process and supporting guidance to improve investment decision-making | Successive Approximation Modelling We are facing an affordability challenge due to costs being inflated once contracts are awarded to suppliers who pass on any unforeseen additional scope back to us as a compensation event. This puts us in a position where we have few options other than to absorb the additional costs and de-scope other schemes, which puts pressure on deliverability of our overall plan. To address this challenge, we are introducing Successive Approximation Modelling, which turns traditional solution development processes on its head by driving out risk and uncertainty to narrow the range of probabilistic time and cost outcomes. As a pre-condition of construction award, teams must assure that they first have a demonstrable plan to deliver on or below the cost and time targets. This will enable the team to prioritise solution development on those areas that have the highest levels of uncertainty and risk first. |



As a result, this technique will increase all parties' (incl. our supply chain) confidence in solution scope and affordability, by providing visibility and mitigation of risks prior to award. It will also accelerate the development phase of the ALP, which will provide greater schedule certainty. 3.4 **Execution tools** Scheduling tool and processes Our finalised Execution Plan for capital programmes is transferred into our capex scheduling tool We us our Capex This allows for clear maintenance of 'live' plans as well as to process changes and reschedule in accordance with new emerging environment factors (such as DWI notices, emerging risks, scheduling tool -Primavera P6 to funding limitations etc.) create transparency in our schedule, The Capex interventions are also captured in forecast release look ahead derived from Capital Investment supported by Programme Planning process (CIPP) and are based on priority and incorporate emerging needs into the processes to planning considerations. assess and reprioritise Re-prioritisation investments We undertake a needs case assessment to evaluate and re-prioritise investments annually. The assessment helps us to identify which investments require least cost and can provide greatest value for our business, our customers, and our stakeholders. The investments that correspond to regulatory requirements always take priority. For capital investments, the submission of Emerging Needs information (which is part of the CIPP) is used to provide inputs. This submission is promoted by the Programme Sponsor to support discussions and capture data for planning and commencement purposes. 3.5 **Programme PMO** Management: We utilise several PMO teams across the business in the areas such as E&C, IT, Asset Management. We maintain PMO These teams are respons ble for tracking performance and overseeing delivery in their respective areas. capabilities in parts of our business to Performance tracking support delivery and To ensure we are delivering towards our goals, we continuously track our performance. We have a defined track performance reporting suite for our delivery PMO which is currently being updated for more comprehensive reporting against our plan We report on our performance monthly with a particular focus on cost and schedule. Each delivery team provides a summary to the Board which includes commentary around performance and further details on key risks and opportunities observed. 36 Risk and **FRM** Governance We utilise our ERM framework to manage risks, with all risks assigned owner and mitigating action plans Our Enterprise Risk that are regularly reviewed. Our ERM team regularly reviews the latest materials on emerging risk Management (ERM) environment from industry-leading external sources and publications. This helps us to support our work on framework is in the enterprise risk profile, develop our principal risks, and strengthen our risk radar. place to govern risk, which has a proven Roll-out of our new GRC system track record, and We are currently rolling out a new risk governance system - GRC. Our ERM team oversees deployment we are currently and implementation of the system, which [went live in September 2023]. We will use an action tracking implementing a new module to monitor mitigation actions on a regular basis. Governance, Risk and Compliance (GRC) system that will be used to regularly track and monitor actions We follow a dedicated change control process to identify, assess, govern, and implement change to 3.7 Change control projects or tranches of work. It helps to maintain a valid reference point against which progress, and We have a performance can be assessed and reported. This rigorous approach ensures changes are only made transparent and when necessary. auditable approach to change control This is a single, transparent, and auditable process for managing change. It helps us maintain a change culture that proactively identifies and manages change events. At a minimum, all proposed changes are assessed for the impact to project scope, cost, schedule, and risk. 3.8 Plan review We undertake an annual business plan review where we assess and re-baseline our execution plan and schedule. We also review any new considerations and emerging changes from the past year. Where We review our appropriate and necessary, we adjust our execution plan and schedule to reflect the changing environment business plan on an that has emerged (e.g., risks that have materialised and delayed delivery). annual basis to understand any emerging changes and plan for potential changes



4. Strategic workforce planning

Delivery of our business plan will require strategic considerations around our workforce. This is particularly important given recent challenges in recruitment and retention, as well as the challenges we face in competition for resources in our Southeast location. There are skills shortages in key areas which will need to be addressed, and our workforce plan needs to account for the step-change in capital delivery and the new skills we will need in the next AMP.

This subsection outlines the details of the current measures we have put in place to ensure we have a defined strategic workforce plan.

| | Measure | Description |
|-----|---|--|
| 4.1 | Capability planning: We understand the capabilities we need in different areas of our business to deliver the plan | We have developed high level plans for our workforce and understand key pinch points and resource challenges. We are developing plans around retention of key skill areas |
| 4.2 | Resourcing: We have a resourcing plan that factors in programme capability and capability requirements and a developed recruitment, retention and sourcing strategy | |
| 4.3 | Training and upskilling needs: We have a clear plan for further development of capability within our business | We have invested in workforce training and have a programme of training courses and curriculum by different experience and speciality |



6. Our Priority Actions

In addition to the current measures we have in place, we will be taking key actions prior to the commencement of, and throughout, AMP8, to augment our ability to deliver. These are outlined below and will be critical to addressing the internal and external challenges during PR24 and de-risking plan delivery.

Project 1

Establish an enterprise-wide agile AMP8 Management Plan

An enterprise-wide plan is required that builds on the turnaround plan that is already in progress. This will utilise the transformation and portfolio management capability we have developed over the last year. This will prioritise and manage change and transformation across the business, which will ultimately support and de-risk delivery through improved operating efficiency. This will:

- Continue to develop the integrated transformation capability in the business. Integrate change management capability to
 oversee and manage overall business change programme (e.g. including CRM rollout, Maximo rollout, efficiency program
 and wider operating model changes);
- 2. Review of existing or planned change and transformation initiatives and develop into coherent and integrated programme;
- 3. Establish and/or refine business cases for major change initiatives, and develop overall case for change for integrated transformation case:
- 4. Develop costed transformation plan; and
- 5. Establish a line of sight between the different efficiency initiatives and how they will actually deliver the desired outcomes.

Project 2

Developing a Strategic Workforce Plan focused on capital delivery

In order to ensure the right capability and capacity is available to de-risk delivery, we will develop a workforce plan that covers resource levels, capabilities, recruitment/sourcing and development. This will cover a sufficiently granular planning of workforce requirements, including resource level, capability assessment and sourcing plan, linked to the work bank, and will focus on high priority areas below:

- Asset management;
- Capital delivery / portfolio management (including PMO);
- 3. Commercial and contract management; and
- Supply chain.

In addition, to address the market-wide challenges we are facing with respect to our workforce (e.g., the ageing workforce, skilled attrition, loss of IP, geographic challenges), we will also be developing a people strategy that covers all aspects of the employee lifecycle, from how we attract and retain talent (e.g. our EVP), to how we undertake succession planning, to ensure we do not lose our critical IP.

Project 3

Setting up an enterprise-wide Programme Management Office

We will set up an overarching programme management office (PMO) function that will coordinate the entire planning and delivery process, from translation of Ofwat's final determination into a clear execution strategy, and throughout delivery.

The programme management function will be respons ble for the following:

- Defining programme roles and responsibilities;
- Coordinating input from stakeholders into the execution planning process;
- Setting up and implementing a formal dependency management process that identifies and proactively monitors dependencies between projects / schemes and across delivery teams;
- Designing and implementing a performance management framework to oversee delivery, including key PMO tools and processes; and
 - Resolving issues and initiating appropriate corrective actions.

The portfolio execution plan, which will be coordinated by the programme management function, will provide a holistic view across all works being delivered, and clearly cascade down into our supply chain (i.e., category plans and supplier scheduling) and workforce planning (i.e., detailed resource requirements).

Project 4

Embedding best practice Asset Data Governance

We recognise that while we have been taking positive steps to improve our IT system architecture, including recent and planned upgrades to drive improved performance (e.g., the transfer of our asset data storage from Ellipse to Maximo asset management system), we have a track record of not utilising these systems as effectively as we should be, particularly due to poor management and integrity of data.



To address this, we will refresh our enterprise data governance, with clear processes and accountabilities to drive a culture that treats data as an asset, throughout the entire data management lifecycle. We will focus on asset data during PR24 as this will have the biggest impact on deliverability. This will ensure we are utilising data to optimise our performance.

Where required, we will carry out upskilling and training of our workforce to embed best practice systems and data management across the business, particularly at the front line.

Project 5

Enhancing our Alternative Delivery Capability

Part of our delivery strategy and plan is a significant increase in alternative delivery models. We already have a team working on the Water for Life Hampshire project, the largest of the alternative delivery strategies. Given the step up, this delivery mode needs to be enhanced and expanded, with appropriate governance arrangements and new capability.

The alternative delivery procurement function will need to be equipped to:

- Develop projects for tender;
- 2. Manage and coordinate with external advisors and specialists;
- 3. Negotiate commercial and regulatory arrangements; and
- Manage projects during the delivery phase.

While there may be opportunities to draw on existing capabilities, the organisational design must reflect that the procurement is different to the in-house approach.

Project 6

AMP8 Supply Chain Readiness

Our supply chain is crucial to the success of the delivery of AMP8. We have set out in this chapter the progress we have made and our plans in this area.

In addition to the work planned and ongoing in this area. We will further develop our category planning While we are in the process of category planning. a step-change is required to develop more comprehensive detail, starting by focussing on high priority and high certainty areas of our business plan (e.g., botex), with a long-term outlook throughout AMP8.

We will continually assess and monitor the supplier market, particularly to validate the capacity of our supply chain to deliver. This will be in the form of frequent engagement of our suppliers, requesting evidence from them (e.g., demonstrating workforce schedule and capacity), and triangulating with our own market analysis to validate levels of confidence in deliverability.

Beyond the planning process, we will actively manage categories, with frequent refresh based on data feeds (e.g., emerging sector risks) and a regular reporting drumbeat.

This will need to be supplemented by increasing our capability in commercial and contract management. The step-up in volume and complexity of our supply chain delivery necessitates a greater level of skill to better and more pro-actively manage our contracts and suppliers, in order to de-risk delivery.

7. Conclusions

In addressing Ofwat's requirement to consider deliverability, we have followed a rigorous four-step approach to reviewing deliverability for our PR24 plan. This included a significant amount of stakeholder engagement across our business.

When we account for a) the changes we have implemented in our Turnaround plans; b) the capability and capacity measures that are in place or being implemented in the business; and c) the priority actions which will be implemented from this deliverability review, we are confident that our business plan proposed for PR24 is deliverable.

