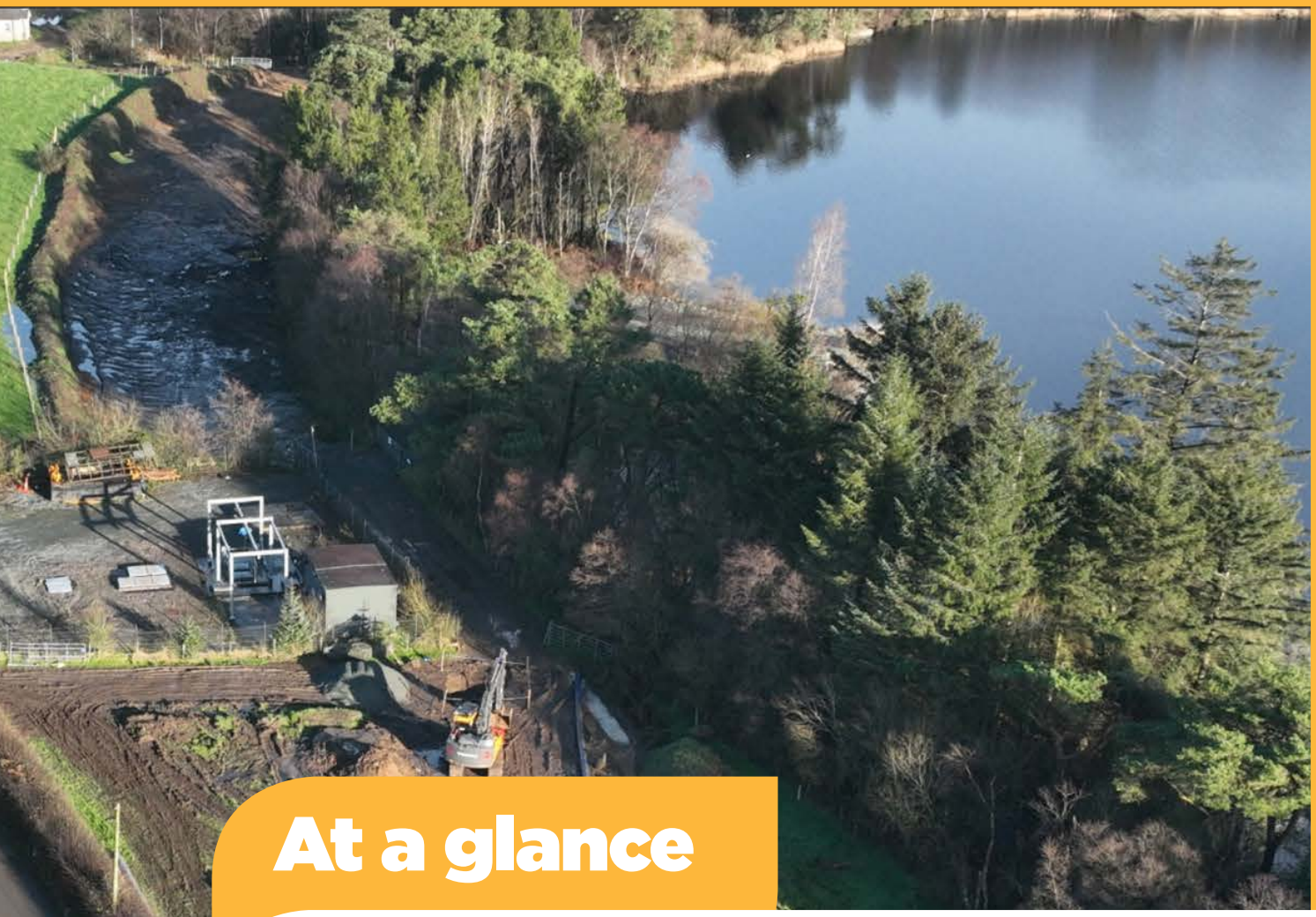
7

Delivering our plan

Our delivery approach, how value for money, innovation and sustainability are embedded, key delivery risks, and our approach to managing risk and uncertainty.





At a glance

What this chapter covers

This chapter explains how NI Water will deliver the PC28 Business Plan in a controlled, efficient and sustainable way. It sets out how deliverability has been built into the investment profile, how NI Water will mobilise from PC21 into PC28, and how governance, programme controls, supply-chain capability, risk management, sustainability, innovation and value for money will support successful delivery throughout the price control period.

A deliverable investment profile

PC28 represents a significant step change in investment and delivery activity. The programme has been phased to balance ambition with practical deliverability, recognising project readiness, internal capability, supply-chain capacity, statutory approvals, affordability and the need for a realistic ramp-up across the five-year period.

Mobilisation and funding certainty

A smooth transition from PC21 into PC28 is essential to retain delivery capability, avoid inefficient demobilisation and remobilisation, maintain supply-chain confidence and ensure sufficient schemes are ready for early-period delivery. Timely funding certainty and alignment between statutory obligations, regulatory expectations, funding decisions and delivery responsibilities are critical dependencies.

Governance, controls and capability

Delivery will be managed through clear governance, defined accountabilities and integrated programme controls. NI Water will use programme boards, integrated scheduling, cost and risk controls, performance reporting and assurance to support timely decisions, transparent management of delivery pressures and effective escalation where required.

Managing risks and dependencies

Key risks, assumptions and dependencies are identified and actively managed through NI Water's Integrated Risk and Resilience Framework. These include regulatory change, planning and consenting constraints, market volatility, supply-chain capacity, skills shortages, climate impacts and major programme dependencies.

Sustainable, innovative and efficient delivery

Sustainability, innovation and value for money will be embedded into how investment is planned, procured and delivered. PC28 delivery will consider whole-life value, carbon, energy efficiency, circular economy principles, nature-based and catchment-based solutions, climate resilience, modern methods of construction and lessons learned from PC21.

PC28 has been designed around a clear deliverability framework supported by early mobilisation, strong governance, integrated programme controls and proactive risk management. Successful delivery depends on funding certainty, organisational capability, supply-chain readiness and effective stakeholder alignment. Through innovation, sustainability and rigorous value-for-money principles, NI Water will deliver improved customer, environmental and resilience outcomes while continuing to operate efficiently and laying the foundations for future investment beyond PC28.

7 Introduction

Delivering the PC28 Business Plan will require NI Water to mobilise and manage a capital programme significantly larger and more complex than in previous price controls. Success will depend on securing the necessary funding, building organisational and supply-chain capacity at a realistic pace, and maintaining effective programme controls. It will also require careful management of the risks and dependencies that could affect delivery.

Chapter 3 explains how deliverability shaped the scale and phasing of the PC28 investment programme. The assessment considered project maturity and sequencing, alongside the pace at which investment could realistically increase from current levels. This informed a stretching but achievable programme, phased to reflect mobilisation requirements, statutory approvals, resource availability and project development timescales.

Building on this assessment, this chapter sets out how NI Water will organise, manage and oversee delivery of the Plan. The remainder of this chapter is structured as follows:

- Section 7.1 provides an overview of our deliverability assurance framework;
- Section 7.2 explains how we will successfully deliver our PC28 plan;
- Sections 7.3 sets out our integrated risk and resilience framework for managing risks at project, programme and corporate level.
- Section 7.4 sets out how our plan delivers innovation and value for money and
- Section 7.5 describes how sustainability has been embedded into our plan;

7.1 How We Have Ensured Our Plan is Deliverable.

Our deliverability assurance framework is structured around five intrinsically linked themes, summarised in Figure 7.1. Collectively, they provide a structured basis for demonstrating that NI Water has, or is putting in place, the capacity, capability, governance and controls required to mobilise, manage and deliver the programme.

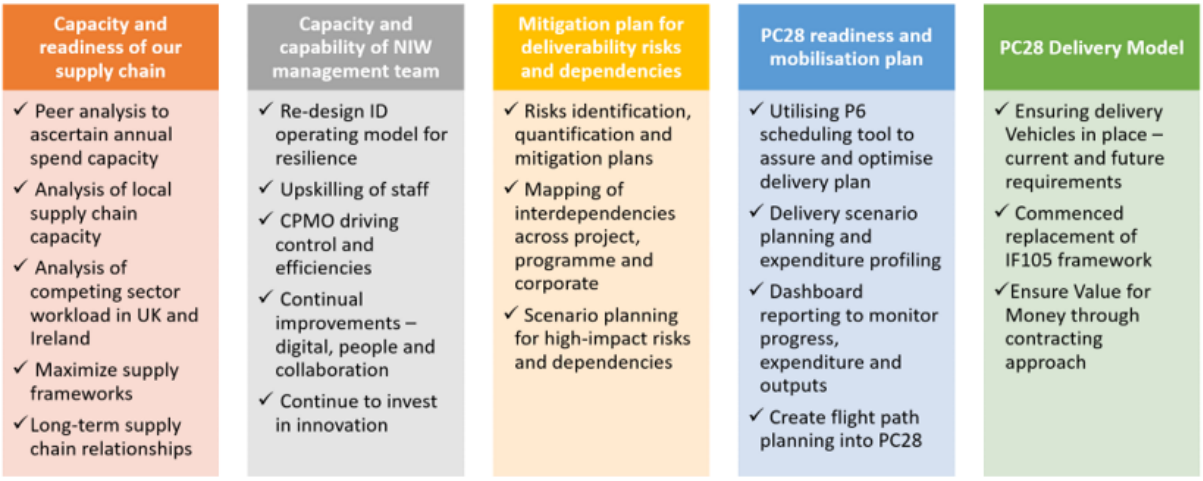


Figure 7.1 - PC28 Deliverability Assurance Themes

The remainder of this section describes each theme in more detail.

7.1.1 Capacity and Readiness of Our Supply Chain.

The infrastructure sector across UK and Ireland is entering a period of major investment, creating significant demand for Contractor, Consultancy and specialist suppliers. We commissioned an

independent market analysis to identify the impact of other major investment programmes across UK and Ireland over the PC28 period and to provide an evidence-based assessment of the likely capability of our supply chain in Northern Ireland in Civils, MEICA. engineering and design services. This external review of Supply Chain Capacity and Capability is included in Appendix 7.1. Its key findings are summarised below:

- **Capability:** a highly capable local supply chain with long standing client relationships and core business centres in Northern Ireland.
- **Capacity:** additional water sector supply chain capacity in Northern Ireland up to c£700m p.a., within an increasing competitive resource market.
- **Key Risks and Dependences:** need for ongoing development of the market and supply chain, providing confidence in future pipeline to secure capacity.

7.1.2 Capacity and Capability of NI Water's Management Team

Delivering PC28 will require NI Water to strengthen its intelligent client capability and ensure that internal resources are aligned with the scale and complexity of the programme. This will involve defining and implementing a resilient operating model that optimises the use of resources within the most effective organisational structure. Alongside this, NI Water will continue to invest in staff development, upskilling its people to strengthen capability and adopt ways of working that support efficiency and effective control.

We also commissioned an external third-party resource assessment for Infrastructure Delivery Directorate, using NI Water organisational data and benchmarking it against selected UK water companies. The assessment evaluated client-side resources required to fulfil key responsibilities across the PC28 lifecycle.

This assessment found that NI Water's current Infrastructure Delivery resource is below the industry benchmark (based on present funding levels), contributing to an over-reliance on external support. It recommended strengthening in-house capability and capacity to create a more efficient and sustainable delivery model, while continuing succession planning to retain critical skills and knowledge.

The review identified an average requirement of 208 FTEs over the six-year period, based on an average annual capital programme of approximately £600 million. Against the forecast PC21 year-end position of 112 FTEs, this represents a requirement for 96 additional posts within the core Infrastructure Delivery functions. A further two posts are required within the executive function, bringing the total additional Infrastructure Delivery requirement to 98 posts.

Despite this increase, NI Water will continue to compare favourably with industry benchmarks. The proposed staffing level equates to approximately £2.9 million of annual investment per FTE, compared with the industry benchmark average of £1.74 million per FTE. It is also approximately 14% below the overall industry headcount benchmark.



We will continue to invest in the development of project and programme Managers, engineers, digital analysts and project controls personnel. This will be supported by improved cost intelligence, systems development, training and professional competency frameworks.

We will also continue to invest in High Level Apprentices and early-career development pathways to build a sustainable skills pipeline, strengthen succession planning and reduce reliance on external professional services where it is efficient and appropriate to do so.

People Development

- APM training undertaken by internal Project Managers
- Competency framework developed for all of ID supporting development
- HLA cohort being upskilled for succession planning
- Development Toolkit rolled-out across Infrastructure Delivery

We will continue to invest in our digital systems and processes to implement efficient ways of managing programmes and project control and drive performance internally and through our supply chain.

Efficiency, Control & Ways of Working

- Performance hubs driving CWP and supply chain performance management
- CPMO and CPMR driving control and efficiencies across cost, risk and value
- Implementation of MS Fabric driving insight

7.1.3 Mitigation Plan for Delivery Risk and Dependencies

As part of our PC28 planning we have identified key assumptions and risks that impact deliverability and have implemented mitigation plans to give assurance that deliverability risks have been considered and are being proactively managed.

These risks and assumptions have shaped how investment needs have been identified, prioritised, phased and costed. While NI Water continues to strengthen the quality of its asset information, there remain areas, particularly for early-stage or scope-uncertain investments, where reasonable, evidence-based assumptions are required to support appraisal and business case development.

To provide transparency and ensure consistency across all sub-programmes, NI Water has developed a consolidated set of strategic risks and assumptions. Table 7.1 summarises the main strategic delivery risks considered during development of the PC28 plan

Table 7.1 – Overview of strategic delivery risks

ID	Strategic Delivery Risk	Description	Management measures
1	Funding and System Alignment	Continued misalignment between statutory obligations, regulatory expectations, funding decisions and delivery requirements may affect programme scope, timing and outcomes.	Ongoing engagement with DfI, UR and other stakeholders; scenario planning; prioritisation of statutory outcomes; phased delivery planning; regular Board oversight
2	Regulatory Standards	Regulatory standards for drinking water, wastewater treatment, storm overflows and environmental quality may change during PC28, requiring revisions to scope, preferred solutions or delivery plans.	Projects are scoped against the regulatory standards currently in force. Any changes during the period will be assessed through formal change control, with impacts on scope, cost, programme and outputs clearly identified.
3	Betterment Approach	The potential withdrawal of the ability to use "Betterment" approaches for wastewater, significantly increasing the scale and cost of solutions.	The PC28 Business Plan clearly identifies where a Betterment approach has been applied, providing transparency on the implications of any change to its acceptability.

ID	Strategic Delivery Risk	Description	Management measures
4	Regulatory Approvals	Planning approvals may be delayed by the department, Habitats Regulations Assessment, Environmental Impact Assessment, landowner negotiations or other consenting constraints.	NI Water will plan and submit applications early, prioritise critical-path approvals and maintain active engagement with local communities and consenting bodies to reduce the risk of delay.
5	Market Volatility	Market volatility including inflation and material cost escalation (steel, concrete, MEICA and specialist plant) may exceed current allowances.	Market indicators will be monitored throughout the period. Material movements in input prices will be considered through established reporting and change-control arrangements.
6	Capacity	Supply-chain capacity may be constrained by concurrent UK and ROI infrastructure programmes, reducing availability of contractors and specialist suppliers.	Early and ongoing supply-chain engagement will continue, supported by forward visibility of the programme and replacement frameworks for existing arrangements where required.
7	Skills Shortages	Shortages in key technical skills (modelling, ICA/SCADA, process and civil engineering) may limit NI Water's ability to deliver the programme efficiently.	NI Water will continue to develop internal capability, use targeted recruitment and training, and work with the supply chain to secure the specialist expertise needed for delivery.
8	Climate Change	Climate-change uplifts may increase the required scale of schemes beyond current buildability assumptions or available footprints.	All projects refer to the regulatory standards that currently apply. Any adjustments in period will be managed through the change control process
9	Belfast Lough Designation	Delay or non-designation of Belfast Lough may alter compliance expectations and require re-scoping of PC28 wastewater enhancement programmes.	Plan on the working assumption that Belfast Lough will be designated, while maintaining regulatory engagement and applying change-control if timelines or requirements change.

Alongside supply-chain and internal capability considerations, several external governance processes have the potential to influence deliverability, particularly for higher-value schemes. Northern Ireland public sector business case requirements for the PC28 capital programme include:

- 35 Outline Business Cases for schemes above £10 million.
- A further 4 Strategic Outline Cases for schemes above £50 million.

The scale of this approval's workload is significant. NI Water is expected to progress 35 Outline Business Cases with values exceeding £10 million during PC28, despite operating within a regulated infrastructure model and a capital programme substantially larger than many public sector delivery bodies. Individual subsequent approvals are required from DfI, DoF and, where relevant, other

statutory bodies. These processes can introduce extended lead times and add uncertainty to project sequencing.

Given the scale of PC28 and the increasing value and complexity of major programmes, efficient progression through governance, approvals and assurance processes will be an important determinant of delivery performance. Opportunities to add value and assurance but streamline approval pathways and reduce avoidable delays will continue to be explored with stakeholders.

NI Water continues to work closely with government departments to streamline interfaces, plan submissions early and prioritise critical path schemes to mitigate associated risks. These external dependencies have been fully factored into programme development and will remain a key focus of PC28 delivery governance.

Alongside these risks, Table 7.2 sets out the key strategic assumptions applied to the PC28 plan. These assumptions provide a consistent baseline for modelling and investment planning, particularly where external certainty may evolve during the period. They are also aligned with the assumptions underpinning NI Water's Long-Term Viability Assessment, corporate risk framework and key planning assumptions relating to funding, regulation, deliverability, workforce capability and supply-chain capacity.

Table 7.2 – Overview of strategic assumptions

ID	Assumption	Description
1	Regulatory Methodologies	The regulatory modelling frameworks used to justify PC28 (such as DAP, UID and WR&SRP methodologies) will continue to be accepted by regulators.
2	Standards Stability	Environmental and drinking water standards will remain broadly stable during PC28 unless explicitly stated in sub-programme assumptions.
3	Flow Guidance Alignment	Wastewater Regulation Reform guidance on Flow Compliance will be finalised early in PC28 and will broadly align with the scopes developed for PC28.
4	PC28 Funding and Financeability	NI Water will receive sufficient DEL funding, borrowing approvals and associated financial support to enable delivery of the PC28 Final Determination and maintain compliance with statutory and regulatory obligations. This assumption is consistent with the assumptions underpinning the Board's Long-Term Viability Assessment.
5	Continuity of Funding	Funding decisions will be made in a sufficiently timely manner to enable continuity between PC21 and PC28, avoiding significant disruption to programme mobilisation, supply-chain capability and project delivery.
6	Supply-Chain Capacity	The UK and Irish infrastructure markets will retain sufficient contractor, consultant, manufacturing and specialist supplier capability to support delivery of the PC28 programme, notwithstanding wider sector investment growth and market pressures.
7	Workforce Capability and Capacity	NI Water will be able to attract, retain and develop the workforce capability required to deliver PC28, including engineering, digital, commercial, environmental, operational and programme-management skills.
8	Planning and Regulatory Consents	Planning approvals, land acquisition, environmental assessments, regulatory approvals and associated governance processes will operate within assumed timelines and will not materially delay delivery of critical projects.

ID	Assumption	Description
9	Climate and Environmental Planning Assumptions	Current climate resilience planning assumptions, design standards and environmental planning parameters remain broadly valid throughout PC28, unless superseded by regulatory or legislative change.
10	Policy and Regulatory Alignment	The broader statutory, regulatory and policy framework will continue to support implementation of the PC28 Final Determination and delivery of associated customer, environmental, resilience and growth outcomes.

7.1.4 PC28 Readiness and Mobilisation plan

NI Water has already begun the readiness activities required to support an efficient transition into PC28. These activities are designed to ensure that the programme can move from plan approval into delivery without unnecessary delay, while maintaining appropriate governance, assurance and control over scope, cost, schedule and risk. Readiness for PC28 has commenced in the following areas:

- **Identification of PC28 readiness projects:** we have identified £46m of readiness projects and activities, including business preparation and enabling works. These have been incorporated in our PC21 delivery plan to facilitate PC28.
- **Project pipeline maturity:** key schemes are currently being progressed through feasibility, optioneering, business case development and early design, so that sufficient work is available to support Year 1 and early-period delivery.
- **Programme controls:** project schedules are being developed within Primavera P6 using historical cycle times, cost information and agreed delivery milestones, creating a baseline dashboard that can be monitored and updated through delivery.
- **Supply-chain engagement:** NI Water is maintaining active engagement with contractors, consultants and specialist suppliers to test market capacity, understand constraints and provide improved visibility of the future work programme.

We have utilised our planning and scheduling software P6 to prepare our deliverable plan. Planners and project managers ran multiple scenarios to identify our optimised delivery plan, based on identified constraints. Project milestones were based on historical timescales and cost loaded to extrapolate the expenditure profile. The composition of the delivery plan was examined to ensure a sustainable spread of sub-programme and major projects activities.

Several major schemes, particularly within the water treatment programme, carry significant scope, risk and complexity. To manage deliverability and avoid disproportionate pressure on design, governance and construction capacity, NI Water proposes a phased approach for these major schemes:

- **New Bio Solids disposal facility:** Business case development and ECI in PC21, planned completion in PC28.
- **Killyhevlin WTW:** Business case development and enabling completed in PC21. Planned completion in PC28.
- **Castor Bay WTW:** approximately 50% of delivery staged within PC28, allowing design, approvals and early works to progress in parallel with completion in early PC33.
- **Dunore Point WTW:** around 25% of delivery included in PC28, reflecting longer lead times, construction sequencing and supply-chain capacity considerations.

7.1.5 PC28 Delivery Model

The deliverability of PC28 is reliant on having the procurement and delivery vehicles in place to deliver the plan. Figure 7.2 shows our live Contractor delivery frameworks and expiry dates. In addition, our professional services frameworks run until 2030 and a number of supply frameworks are in place.

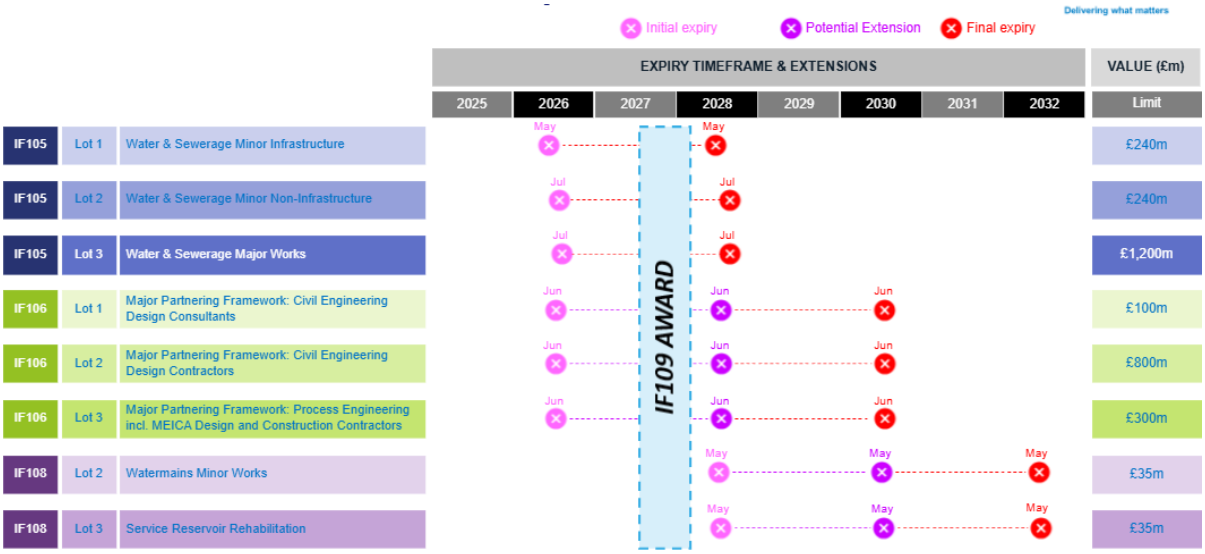


Figure 7.2 - PC28 Capital Delivery Contractor Frameworks

The replacement of IF105 has commenced with award programmed for Q4 2027 in advance of current framework expiry in summer 2028. The replacement framework IF109 is a multi-lot framework with a reserve list of Contractors and will offer the flexibility and agility to run alongside and/or replace IF105, IF106 and IF108.

Figure 7.3 outlines the principles adopted in our commercial strategy for our new IF109 framework, supporting long-term partnerships, openness and trust, sustainable delivery and improved outcomes.



Figure 7.3 - IF109 Commercial Strategy Themes

7.2 How We Will Deliver Our PC28 Plan

Building on our successful delivery approach established during PC21, NI Water will deliver the PC28 plan through robust integrated programme controls, consistent governance and assurance, building strong supply-chain partnerships and transparent performance reporting. Our objective is not simply to deliver projects, but to translate investment into improved customer, environmental, resilience and economic outcomes. This includes supporting NI Water's long-term strategic outcomes of a healthy and thriving population, a growing economy and a flourishing natural environment. Our approach is designed to maintain focus on statutory compliance, customer outcomes and value for money, while

providing early warning of emerging delivery pressures so that corrective action can be taken in a timely and controlled manner.

7.2.1 Integrated Programme Controls

Each project and programme of work in the PC28 delivery plan will be managed using NI Water's integrated set of project controls systems and processes for cost, risk and value and P6 scheduling. These processes have been integrated into our bespoke capital expenditure system CPMR, connecting scope, schedule, cost, risk and value outputs. CPMR provides powerful live reporting capability in addition to managing project governance. Our embedded Capital Programme Management office (see fig 7.4) ensures assurance across the capital works programme, supporting our delivery teams to drive both process and value efficiencies. These controls provide the discipline needed to manage a larger and more complex programme while maintaining transparency over scope, cost, schedule and delivery risk.



Figure 7.4 - Capital Programme Management Office (CPMO)

7.2.2 Supply Chain Management

We will build long-term strategic partnerships with our supply chain, focusing on value, performance and resilience rather than price alone. This will be supported by a structured relationship management approach with clear governance, behaviours and reporting, alongside digital KPIs and dashboards to monitor performance and identify improvements. Work will be allocated using performance measures that reward strong delivery and address underperformance, while regular engagement and capacity assessments will help us understand supply chain capability, anticipate constraints and strengthen resilience across the PC28 programme.

7.2.3 Monitoring, Reporting and Performance Management

We will monitor delivery against our PC28 performance commitments using a transparent set of measures that link investment to outcomes. Performance information will be reviewed routinely through established management forums and performance hubs, using live dashboards and enabling timely corrective action where performance is at risk. This approach supports a strong performance culture, provides confidence to stakeholders, and ensures that delivery remains focused on what matters most to customers and the environment.

- Regular reporting of progress against outputs and targets, supported by consistent definitions and clear accountability for performance. Using live dashboards which translate CPMR data or performance hubs at all levels of the organisation.
- Weekly and monthly performance hubs to review capital delivery indicators.
- Forecasting and trend analysis to highlight emerging performance risks before they impact customers or regulatory compliance.
- Benefits realisation tracking to confirm that planned improvements are being delivered and sustained.
- Clear communication of delivery progress and constraints to customers and stakeholders, including through statutory and regulatory reporting processes.

7.2.4 Assurance and Continuous Improvement

Delivery confidence is strengthened through effective assurance. We will maintain a structured assurance programme that provides independent challenge on the quality of plans, the robustness of delivery controls, and the reliability of performance information. Lessons learned from PC21 delivery and from assurance reviews will be embedded into our ways of working, supporting continuous improvement in efficiency, safety and customer outcomes.

The assurance approach reflects the Board's requirement for independent verification of the effectiveness of governance, risk management and internal control arrangements. Assurance evidence from programme reviews, Internal Audit, external assurance providers and performance outcomes will be used to support ongoing assessment of whether PC28 risks are being managed within acceptable tolerances and whether additional intervention is required.

- Internal assurance through CPMO and governance reviews of programme baselines, cost forecasts and delivery readiness.
- Independent assurance activity, where appropriate, to validate key elements of the plan and delivery arrangements.
- Internal Audit reviews to provide objective assurance on control effectiveness and to identify improvement actions.
- Supply chain performance reviews and continuous improvement initiatives to drive safety, quality and efficiency.
- Systematic capture of lessons learned and best practice, feeding into standard designs, process improvements and training.

7.2.5 Governance, Accountability and Decision Making

Successful delivery of PC28 requires disciplined governance from plan approval through to project handover. It also requires clarity of accountability and alignment between decision-makers, funding providers, regulators and delivery organisations. We will apply a clear chain of accountability from the Board and Executive Committee through to Senior Responsible Owners, programme leads and project managers. This provides decision clarity, supports timely escalation and ensures that delivery choices remain aligned with regulatory obligations and the priorities set out in the Business Plan.

The governance framework aligns with NI Water's Integrated Governance Framework and Integrated Risk and Resilience Framework, ensuring that accountability, capability, processes, stakeholder engagement, assurance and delivery outcomes remain connected throughout programme delivery.

- Board oversight of PC28 delivery performance, risk and emerging issues through regular performance and assurance reporting.
- Executive Committee governance to drive delivery focus, resolve cross-business dependencies and ensure resource alignment.
- Programme boards and delivery forums for each major delivery programme, with defined terms of reference, delegated authority and escalation routes.
- Defined accountabilities for outcomes, budgets, benefits and risks, supported by documented decision logs and change control approvals.
- Structured engagement with key stakeholders (UR, DfI, environmental and drinking water regulators) to provide transparency on progress and constraints and promote alignment between statutory requirements, funding decisions and delivery outcomes.

7.3 How We Will Manage Risk.

Our Integrated Risk and Resilience Framework establishes clear accountability for managing risk, from the Accounting Officer through to all employees, within acceptable levels set by the Board. It defines the roles and responsibilities of the Board and its Committees, the Executive Committee, Directors, Senior Managers, Risk Champions and employees, as illustrated in Figure 7.5.

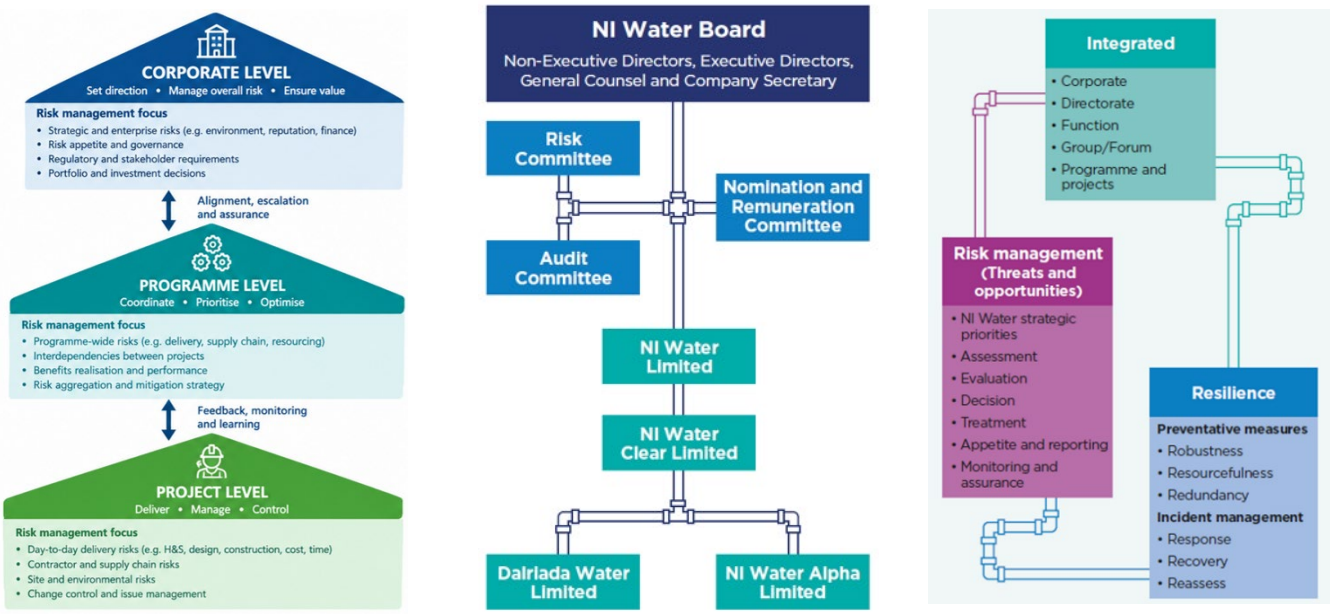


Figure 7.5 - NI Water's Integrated Risk and Resilience framework and governance structure

The framework connects risks across corporate, programme and project levels, promoting an enterprise-wide approach to risk management, resilience and value creation that supports NI Water's strategic priorities. It complements the Group's Integrated Governance Framework, which provides the structure for effective governance, escalation and communication across the business and with key stakeholders. Together, these frameworks set out how emerging risks are assessed and managed during PC28.

A range of information is used to establish corporate threats and opportunities, including benchmarking against other water companies, the Internal Audit Opinion, the Accounting Officer's Annual Assurance Statement, changes in legislation and government guidance, and emerging risks to NI Water. This includes horizon scanning outputs, assurance statements, regulatory developments,

Board risk workshops, Internal Audit findings, emerging sector trends and lessons learned from incidents and near misses. Corporate risks are considered by the Risk Committee and approved by the Board.

Risk appetite is determined by the Board and reviewed periodically through the Risk Committee. The purpose of risk management is not to eliminate all risk but to ensure informed decision-making, proportional controls and appropriate resilience arrangements, whilst balancing delivery of customer, environmental, regulatory and financial outcomes.

The Executive Committee meets quarterly to assess corporate risks and agree the improvements required to address evolving business needs. Corporate and directorate risk registers have clearly defined owners and are reviewed on a continual basis using risk management software, with monthly reports generated for monitoring purposes. Corporate risk maps are presented to the Risk Committee on a cyclical basis, and directorate risks can be escalated to senior management when they are graded as high or medium. An established escalation process is also in place to alert the Chief Executive, Board and stakeholders to significant new issues.

The Risk Committee updates the Board quarterly on improvements to threat management, benefits realised from opportunities, changes in resilience, escalated risks and completion of improvement actions. The Risk Committee also receives reports on risk appetite, and the Board routinely holds workshops to consider risk appetite across key risk themes. The Audit Committee receives reports on financial risk management and informs the Board about NI Water's current and emerging financial risks.

The Board receives monthly updates on the status of corporate risks and provides a bi-annual strategic risk management report to the Department for Infrastructure. Risk management is a standing agenda item in shareholder meetings, and relevant stakeholders are engaged where risks affect them or require coordinated action. This reporting framework supports the Governance Statement, Annual Integrated Report and Accounts and wider assurance processes by demonstrating how NI Water identifies, assesses, manages and reports risks and opportunities that could affect achievement of its strategic priorities.

7.3.1 Managing Delivery Risk in PC28.

For PC28, the Integrated Risk and Resilience Framework is applied at corporate, directorate, programme and project levels. Risks have defined owners and are monitored, reviewed and escalated through established governance routes.

At project level, we identify and quantify risks in proportion to each project's scale and complexity. Project risk registers and the associated governance process are embedded in CPMR, supporting proactive risk management throughout the project lifecycle. The CPMO risk team manages the risk budget through a defined risk drawdown process.

7.4 Innovation and Value for Money (VFM)

Our delivery approach for PC28 is designed to achieve the required outputs and performance commitments in a way that is sustainable, encourages innovation and demonstrably delivers value for money for customers. Supported by our value management process and CPMO value team. Fig 7.6 shows how our value management approach is embedded into our approval stage gates throughout the lifecycle of each project.

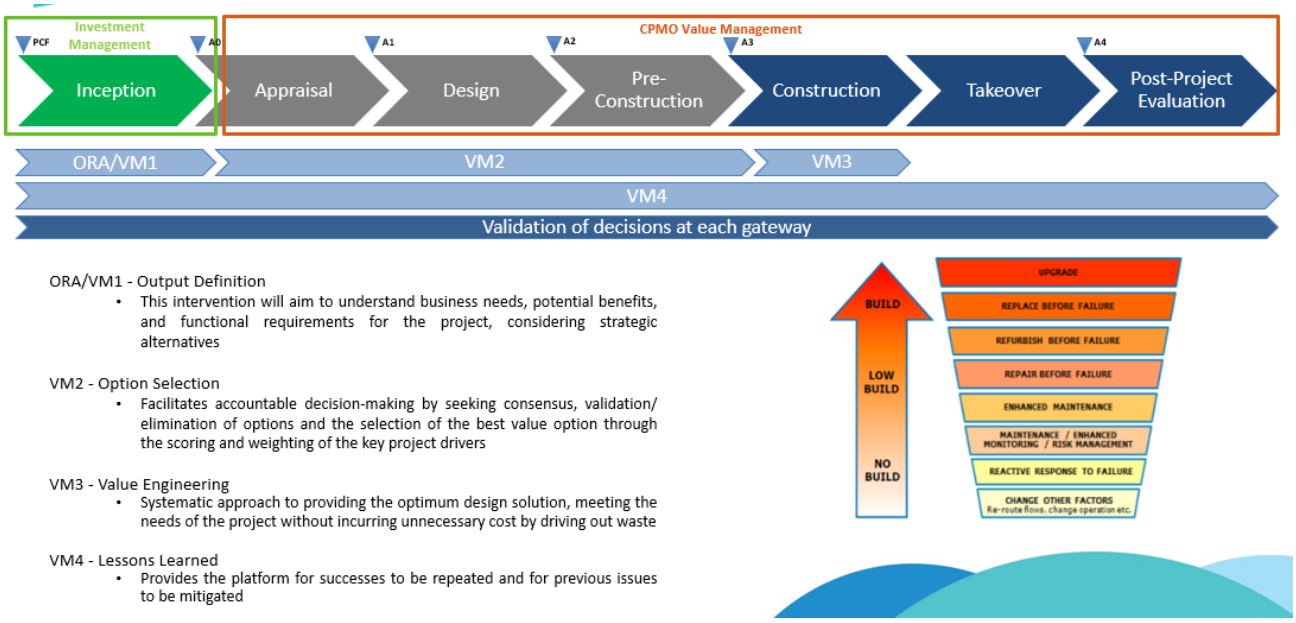


Figure 7.6 - Embedded value management approach

We will continue to grow our internal commercial and cost intelligence capability to support whole life cost decision making, accurate budget determination and benchmarking to challenge contract prices and ensure value for money. Our internal costings tool IPAC has been enhanced for PC28 submission with open book cost data captured in PC21 and will be maintained as a live benchmarking tool throughout PC28.

The approach recognises that achieving greater outcomes from increasing levels of investment is a challenge being faced across the wider water sector and requires continuous improvement in productivity, innovation and delivery effectiveness. We will do this by making whole-life value the default decision lens, by creating the right commercial incentives for our delivery partners, and by using data and standardisation to reduce avoidable cost, carbon and delivery time. Value for money in PC28 extends beyond minimising cost and includes delivery of long-term social, environmental, resilience and economic outcomes, consistent with NI Water's broader public value objectives.

The Board's innovation risk appetite recognises the need to embrace new approaches, technologies and delivery methods where these improve outcomes, resilience, efficiency or sustainability, while remaining consistent with regulatory obligations and value-for-money principles.

7.4.1 Whole-life Cost and Performance.

Optioneering and business cases will consider capital, operating and maintenance costs, energy use, resilience and deliverability to select options that provided best whole-life value, not simply lowest upfront cost. This includes:-

- Standardisation and repeatability: increased use of standard designs, standard MEICA solutions and repeatable delivery packs to reduce design effort, shorten delivery timescales and improve quality and safety.

- Target cost and open-book cost visibility: use of NEC contracts and, where appropriate, target cost arrangements to align incentives, improve cost transparency and share the benefits of efficiencies.
- Leaner, Faster Processes: We will continue to embed the A0–A5 process map, supporting accelerated progression from feasibility through to construction, and enabling improved efficiency during project handover across directorates.
- Business Transformation: Our PC21 transformation programme will continue into PC28, focusing on digitalisation, enhanced collaboration, and improved deliverability. We will progress toward a more intelligent client model, using data driven insights to support decision making and programme optimisation.
- Portfolio optimisation: programme-level sequencing to minimise peaks and troughs, reduce preliminaries and enable smarter packaging of work to drive economies of scale.
- Performance management: KPIs and performance forums to reward high-performing partners, address underperformance early and embed continuous improvement.

7.4.2 Innovation and Efficiency

In PC28 innovation and efficiency will be driven through early engagement, collaborative delivery and the systematic use of data. We will focus on practical innovations that reduce delivery time, improve safety and quality, lower carbon and reduce whole-life cost including:-

- Early Contractor Involvement (ECI): structured ECI to improve buildability, reduce risk and identify opportunities to simplify scope and reduce cost and carbon.
- Digital programme controls: continued development of Primavera P6 planning, integrated dashboards and analytics to support forecasting, intervention and evidence-based decision making.
- Modern methods of construction: increased use of off-site manufacture, modularisation and standard components where these provide safer, faster and lower-carbon delivery.
- Innovation pipeline with supply chain: supplier forums to identify and trial proven technologies (e.g., energy optimisation, process intensification, smart monitoring) and embed learning across programmes.
- Lessons learned from PC21 will be embedded into PC28 delivery, including earlier contractor involvement, greater asset standardisation, stronger cost management, clearer value management and improved commissioning and handover arrangements
- Capital efficiencies management: Figure 7.7 sets out our capital efficiencies management approach, to identify and monitor efficiencies and inefficiencies and track progress against our regulatory efficiency challenge.

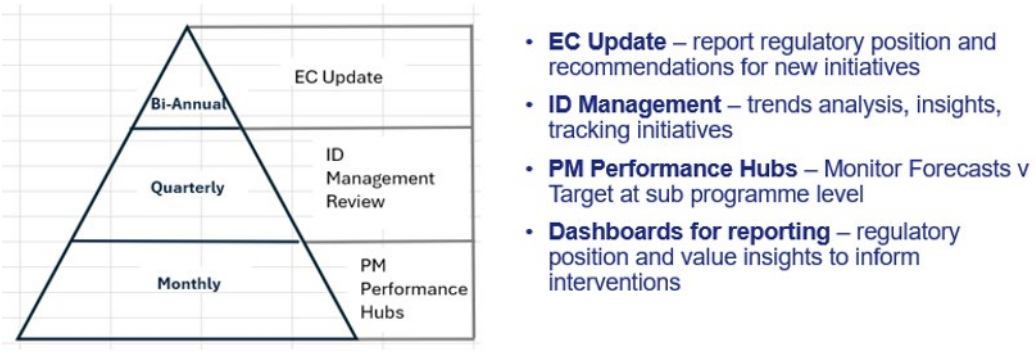


Figure 7.7 - Capital efficiencies management approach

7.5 Embedding Sustainability into PC28 Delivery

Sustainability is embedded throughout the PC28 Capital Investment Plan, ensuring that required outcomes are delivered while minimising carbon emissions, resource consumption and environmental impact, and maximising long-term value for customers and society. This aligns with NI Water's Environmental, Social and Governance (ESG) risk appetite, which promotes sustainable growth across financial, manufactured, natural, social, intellectual and human capital through a circular economy approach.

The development of PC28 investments has taken account of NI Water's Climate Change Strategy and the Climate Change Act (Northern Ireland) 2022. Projects have been designed using updated climate allowances, including up to a 35% increase in peak rainfall and river flows, to ensure assets remain resilient throughout their operational life. The programme supports both climate mitigation and adaptation, contributing to NI Water's ambition to reduce territorial-based emissions by at least 16.6k tCO_2e by 2032, based on our 2023/24 reported emissions, through operational efficiencies, renewable energy, fleet and estate transition.

Climate resilience has been a key consideration in project development. Investment priorities include protecting vulnerable assets from flooding, improving water supply resilience, and applying nature-based and catchment-based solutions where these provide sustainable and cost-effective outcomes. Sustainable Urban Drainage Systems (SuDS), stormwater management measures and upstream catchment interventions have been incorporated where appropriate to reduce runoff, improve water quality and enhance resilience to extreme weather.

PC28 also reflects a commitment to reducing whole-life carbon and resource use through collaboration with the supply chain and by prioritising solutions that extend asset life, avoid unnecessary construction and reduce operational energy demand. Natural capital, biodiversity enhancement and wider social value have been considered as part of project optioneering and investment decision-making.

Delivery will be supported by a Climate Transition Plan, which will define the actions, investment and timescales required to achieve longer-term net zero and resilience objectives. Progress will be monitored through carbon accounting, sustainability performance indicators and assurance activities, providing transparent reporting and driving continuous improvement across programmes and the supply chain.

7.6 Appendices and Annexes

The following appendices and annexes provide supporting information for this chapter.

Reference	Supporting Document
Appendix 7.1	OutForm Consulting review of Supply Chain Capacity and Capability
Appendix 7.2	OutForm Consulting review of Workforce Planning Headcount for PC28