







Price Control for Northern Ireland Water 2021-2027

Mid-Term Review Final Determination

September 2024









About the Utility Regulator

The Utility Regulator is the independent non-ministerial government department responsible for regulating Northern Ireland's electricity, gas, water and sewerage industries, to promote the short and long-term interests of consumers.

We are not a policy-making department of government, but we make sure that the energy and water utility industries in Northern Ireland are regulated and developed within ministerial policy as set out in our statutory duties.

We are governed by a Board of Directors and are accountable to the Northern Ireland Assembly through financial and annual reporting obligations.

We are based at Queens House in the centre of Belfast. The Chief Executive and two Executive Directors lead teams in each of the main functional areas in the organisation: CEO Office; Price Controls; Networks and Energy Futures; Markets; Consumer Protection and Enforcement. The staff team includes economists, engineers, accountants, utility specialists, legal advisors and administration professionals.

OUR MISSION

To protect the short and long-term interests of consumers of electricity, gas and water.

OUR VISION

To ensure value and sustainability in energy and water.

OUR VALUES

ACCOUNTABLE

We take ownership of our actions.

TRANSPARENT

Ensuring trust through openness and honesty.

COLLABORATIVE

Connecting and working with others for a shared purpose.

DILIGENT

Working with care and rigour.

RESPECTFUL

Treating everyone with dignity and fairness.









Abstract

The Utility Regulator (UR) is the independent economic regulator for water and sewerage services in Northern Ireland. Our primary role within the water industry is to protect the interests of consumers, both today and in the future.

PC21 is our current price control for Northern Ireland (NI Water). It runs for the period 2021 to 2027. PC21 ensures the monopoly company - NI Water - who deliver our water and sewerage services, has enough revenue to operate an efficient business that delivers what Northern Ireland consumers need. We take account of the Department for Infrastructure's (Dfl) Social and Environmental Guidance (S&EG) in coming to our price control decisions.

As part of PC21, we allowed NI Water an opportunity to clarify expenditure requirements for the price control period for costs which were uncertain when we set our PC21 Final Determination in 2021. This is called the Mid-Term Review (MTR). This Final Determination sets out our final MTR conclusions, following our assessment of NI Water's MTR submission and the consideration of the responses that we received to the consultation on the provisional findings published in our Draft Determination.

We propose an increase in tariffs equivalent to 4.5% in each of the last two years of the price control period to allow for increases in power costs. We also propose a capital allowance equivalent to c£2.37bn in 'money of the day' prices (i.e. nominal) for the full price control period. Some limited adjustments to output targets are also proposed. Our MTR findings will form the basis for our ongoing monitoring and reporting of NI Water's performance during the remainder of PC21, through our established Annual Information Return and Cost and Performance Report processes.

Our MTR process has identified that some further work is required to establish why some of NI Water's capital costs are higher than predicted, despite the lack of evidence for cost pressures above inflation (i.e. Real Price Effects). This piece of work will be undertaken and concluded separately outside the MTR process, and we will take account of the outcome of this work as part of the PC21 Outturn Report process.

Audience

Principal stakeholders (i.e. Department for Infrastructure, NI Water, Northern Ireland Environment Agency, Consumer Council for Northern Ireland, Drinking Water Inspectorate), consumers and their representatives.

Consumer impact









This document sets out our PC21 Mid-Term Review Final Determination findings. It explains the changes that we propose making to charges, our revised assessment of the capital funding required to deliver the established needs and the impact that the process has had on the outputs and delivery targets for PC21.









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Foreword

The Utility Regulator (UR) is the independent economic regulator for water and sewerage services in Northern Ireland. Our primary role within the water industry is to protect the interests of consumers, both today and in the future.

PC21 is our current NI Water price control. It ensures the monopoly company – NI Water - who deliver our water and wastewater services, has enough revenue to operate an efficient business that delivers what consumers in Northern Ireland need.

Our PC21 Final Determination was published in May 2021 and covers the six-year period from 2021 to 2027. As part of this process, NI Water submitted a business plan to us detailing how it was going to meet the priorities set out in the Department for Infrastructure's (DfI) Social and Environmental Guidance (S&EG). This guidance recognised that continuing investment at previous levels would have a significant detrimental impact on the economy, the environment and the wellbeing of citizens.

In line with the S&EG, our PC21 Final Determination ensured value for money by setting revenue allowance which we deemed necessary to support a deliverable investment plan which was also efficient and affordable from a tariff perspective. This was a positive development which we continue to support.

PC21 also provided NI Water with a single opportunity to deal with material changes during the period 2021 to 2027, to address any uncertainty that existed at the time of the PC21 Final Determination. This is called the Mid-Term Review (MTR).

The purpose of this Final Determination is to set out our final MTR findings, following our assessment of NI Water's MTR submission and consideration of the comments received in response to our MTR Draft Determination consultation.

The Final Determination conclusions remain largely in line with those in our MTR Draft Determination, however, the MTR has also identified further work which we plan to complete outside the MTR process to establish the reason for the capital cost increases being experienced by NI Water. The outcome of this further work will be taken into account in our next NI Water price control. For avoidance of doubt, this means no further reopening of PC21 will take place.

Our capital investment conclusions therefore do not account for any costs which might subsequently be considered 'allowable' as a consequence of the completion of this work. Until this work concludes, the figures quoted in this PC21 MTR Final Determination should therefore be viewed as being at the lower end of the range, in terms of the expenditure required to deliver the associated outputs.

To avoid any potential misunderstanding in the interim, any reference to the capital investment figures by stakeholders should clearly acknowledge this and the potential for the expenditure required to deliver the mid-term review outputs to be higher.

Our MTR determines:

- Limited adjustments to output targets.
- An average tariff increase of 4.5% in each of the last two years of the PC21 period to mitigate against an unprecedented increase in NI Water's power costs.
- A capital allowance of c£2.4bn in 'money of the day' prices (nominal) for the full price control period to maintain existing services and deliver the upgrades required to meet its quality, environmental and service level obligations.

Our MTR Final Determination remains consistent with the S&EG principles.

Our MTR will set a revenue allowance which we believe is necessary for NI Water to operate in line with its statutory obligations. Whilst ongoing Government public expenditure constraints may affect the budget available to NI Water, the MTR does not take this into account, as we consider this to be a matter for NI Water and its shareholder, Dfl.

Key Findings

Operating Costs

We determine that NI Water should be allowed some additional revenue allowance due to the significant increase in its power costs. We have allowed an increase of £54m compared to the PC21 Final Determination to cover the estimated variance in power costs for the final three years of the price control period. This adjustment results in an average tariff increase for non-domestic consumers (we call this a weighted annual average charge increase or WACI) which is equivalent to 4.5% for each of the final two years of PC21.

We found that all other types of revenue in NI Water's MTR submission largely balanced out. We therefore did not consider them in our MTR Draft and Final Determinations due the immateriality of the net impact. This approach aligns with the established principle that the PC21 MTR should only reopen material issues and retain the integrity of the PC21 Final Determination as far as possible.

Capital Investment

We have decided on a capital allowance of c£2.4bn in 'money of the day' prices (i.e. nominal prices) for the full price control period to maintain existing services and deliver the upgrades required to meet its quality, environmental and service level obligations. In terms of how we have arrived at this figure, we note that:

- The proposed capital allowance for the full price control period is £1.77bn in 2018-19 prices (i.e. the real terms price base for PC21 which allows costs to be compared on a consistent basis). This reflects the outcome of our assessment of the company's updated capital submission for wastewater and sewerage schemes and the inclusion of three 'change control' projects required to meet water quality or supply resilience needs. The increase from the Draft Determination largely reflects the inclusion of costs for some substitution projects to align with the outputs which had already been included.
- However, inflation in PC21 has been much higher than assumed at the time
 of the PC21 Final Determination. We estimate that the nominal requirement
 for the period as a whole has increased from £2.1bn at the PC21 Final
 Determination to £2.4bn.
- NI Water requested an additional £0.38bn of Real Price Effects (i.e. cost pressures above inflation) as part of its MTR submission. This equates to

¹ The Change Control Protocol allows for new projects to be added to a price control after the Final Determination if a critical need arises and stakeholders agree that it is necessary. Further details can be found in Annex M of the PC21 Final Determination.

£0.32bn when the difference between March 2023 and March 2024 inflation figures are taken into account. However, we have not seen sufficient evidence to justify a claim for Real Price Effects, based on our analysis. So, we have excluded NI Water's Real Price Effect claim. This represents the majority of the difference between our decision of £2.4bn nominal and the nominal figure of £2.75bn submitted by NI Water. However, the information submitted by NI Water in response to our MTR Draft Determination appears to indicate that costs being experienced by NI Water are higher than their original cost estimates adjusted by RPI. As this is not explained by Real Price Effects and we need to determine why this is the case. This is a complex issue which will take time to resolve and so we have decided to consider it outside the MTR process to avoid any undue delay to the MTR's completion. We will continue to work with NI Water to conclude on this matter and we will take account of the outcome of this work in our next NI Water price control. Stakeholders should recognise that this might conclude that NI Water would be unable to deliver the outputs in the MTR for the allowances determined and so any reference to the capital investment figures quoted in the MTR Final Determination should reflect this context.

Outputs

The changes made to outputs within the Mid-Term Review are limited.

The targets for four wastewater and sewerage nominated outputs have been adjusted to account for NI Water's wholesale review of the solutions and costs for wastewater and sewerage schemes. This exercise has identified that costs have increased materially in general which is putting pressure on the delivery programme, that some schemes are no longer required, and that further time is needed to investigate lower cost solutions in cases where costs have increased disproportionately.

Targets for two consumer measures have been updated to reflect the outcome of a planned review by the Consumer Measure Satisfaction (CM/SAT) stakeholder group. Eight development outputs have been closed following their completion and low pressure targets have been rebased to account for a comprehensive reassessment of low pressure issues undertaken by NI Water.

Targets for a further two measures (renewable power percentage and impermeable surface area removed) have been changed based on queries we originally raised in the PC21 determination process and wastewater percentage compliance targets (by works and population equivalent) have been adjusted to reflect the changes in the number of wastewater treatment work outputs.

1. Introduction

Regulatory Context

- 1.1 UR's primary role within the Northern Ireland water industry is to promote and protect the interests of the consumer, both today and in the future.
- 1.2 NI Water's main shareholder is DFI. NI Water is responsible for providing water and sewerage services to consumers in Northern Ireland. Since it is the sole provider of these services, UR regulates the amount of revenue the company receives.
- 1.3 Our determination of the company's revenue requirement is undertaken through periodic price controls. These:
 - Establish the funding required by NI Water to meet Dfl priorities for the price control period contained within its Social and Environmental Guidance (S&EG);
 - Require NI Water to deliver enhanced regulatory outputs, continued investment, improvements in service and efficiencies; and,
 - Aim to ensure value for money for consumers and determine how much the company is allowed to charge.
- 1.4 The domestic consumer charge and the domestic allowance for commercial consumers is met by Government subsidy through public expenditure (PE) mechanisms. The remainder of the charge for non-domestic consumers is recovered through bills.
- 1.5 The fact that NI Water relies on Government funding for the majority of its revenues, means it is also classified as a non-departmental public body for public expenditure (PE) purposes. As a result, it is subject to the rules that govern PE and is required to operate within PE limits set by the Northern Ireland Executive. Our regulatory processes and determinations are set within this context.

Overview of NI Water Price Controls

1.6 NI Water's first three price controls, known as PC10, PC13 and PC15, covered the three year period (2010-13), the two year period (2013-15) and the six year period (2015-21) respectively. NI Water is currently in its fourth regulatory price control period, known as PC21, which began on 1 April 2021 and runs for six years until 31 March 2027.

- 1.7 Longer timescales were introduced for PC15 and PC21. This was to provide a more stable and predictable framework to support Dfl's long-term water strategy. Longer price control periods can also promote better planning and efficient delivery.
- 1.8 A period of six years was chosen to provide an appropriate balance between allowing sufficient time for efficient planning/delivery and the potential uncertainty of outcomes associated with planning over the long term.
- 1.9 Our approach to PC21 was developed within the context of Dfl's long-term water strategy (LTWS) for Northern Ireland. This covers a 25-year horizon and aims to deliver a more strategic, holistic and integrated approach to the management of all aspects of the water and sewerage industry.
- 1.10 Dfl's LTWS helped inform the content of the Department's S&EG for the PC21 period. The S&EG was subsequently reflected in NI Water's business plan proposals and the outcome of our PC21 Final Determination.
- 1.11 The development of our approach for our next price control period has already commenced through initial engagement with principal stakeholders and the appointment of specialist consultancy support.

Provision for a PC21 Mid-Term Review

- 1.12 As in PC15, our PC21 Approach recognised the uncertainty that might be associated with longer investment planning periods and that work undertaken in the early part of the price control period might help inform delivery proposals for the remainder of PC21.
- 1.13 We therefore provided NI Water with a single opportunity, to deal with material changes, to address any uncertainty that existed at the time of the PC21 Final Determination. We call this the Mid-Term Review.
- 1.14 In Section 6 of our <u>PC21 Final Determination</u>, we explained the potential remit of the Mid-Term Review and listed the elements of the price control that we were not minded to re-open as part of the process.
- 1.15 Our approach to the Mid-Term Review built upon the outline proposals included in our PC21 Final Determination and was informed by the outcome of engagement undertaken with our principal stakeholders:
 - Department for Infrastructure (DfI);
 - Northern Ireland Water (NI Water);
 - Consumer Council for Northern Ireland (CCNI);

- Drinking Water Inspectorate (DWI); and,
- Northern Ireland Environment Agency (NIEA).

2. The Mid-Term Review Process

Our approach

- 2.1 When we introduced the concept of a Mid-Term Review, it was our intention that it should be limited to those areas where it would provide benefit or was necessary. This is to ensure the opportunities and incentives of a 6-year plan are maintained as far as possible.
- 2.2 Our PC21 Mid-Term Review has been undertaken in this context and we have taken this into account when undertaking our assessments and coming to our conclusions.
- 2.3 The approach also recognises that established processes already exist for accounting for change, such as the logging up and down process that will be applied in the next price control.
- 2.4 In addition, we considered opportunities for the Mid-Term Review to feed off existing regulatory processes and sources of information, such as the annual information return and the planned PC21 scope certainty submissions, to try to keep it as proportionate as possible.

Engagement and consultation

- 2.5 Our intention was that the Mid-Term Review process should be as open, transparent and collaborative as possible. We have therefore engaged with NI Water, and principal stakeholders, during the process and acknowledge and appreciate the input that has been provided.
- 2.6 In advance of the publication of the Draft Determination, we provided updates on the emerging findings of the process, so that some initial feedback could be provided, and considered, before we consulted on our provisional findings.
- 2.7 The formal consultation on our Draft Determination commenced on 2 May 2024 and closed on 27 June 2024. We received responses from NI Water, CCNI, DWI, NIEA and the Ulster Farmers Union.
- The comments received, and our responses to them, are collated in Annex A
 PC21 MTR Consultation Response Summary, and are reflected in our Final Determination where appropriate.
- 2.9 In advance of the publication of the MTR Final Determination, we undertook further engagement with NI Water, and principal stakeholders, so that they

had foresight of our key conclusions and the opportunity to comment on them.

Our approach to specific elements of the Mid-Term Review

- 2.10 Sections 3, 4 and 5 of the Final Determination document detail how we have undertaken our Mid-Term Review assessment for the key areas of the price control as follows:
 - Section 3 Outputs;
 - Section 4 Operating Expenditure; and,
 - Section 5 Capital Investment.
- 2.11 These sections outline the key issues considered, the approach taken, and the conclusions reached.

3. Outputs

Background

- 3.1 During a price control period, water and sewerage companies deliver a series of outputs, which aim to secure the outcomes consumers want.
- 3.2 For PC21, we assessed NI Water's proposed outputs in line with the anticipated level of investment and the priorities set out in Dfl's S&EG. The outputs included in the PC21 Final Determination formed part of an overall package which the company is expected to deliver.
- 3.3 Tables 3.1 and 3.2 of our PC21 Final Determination detailed the targets we had set for the 45 consumer service, water service, and sewerage service key performance measures established for NI Water for the period. The specific named schemes that the company was expected to deliver were listed in Annex G. In addition, we set 25 development objectives² for NI Water, which were listed in Table 3.3 and Annex T of our PC21 Final Determination.
- In the Mid-Term Review, we have tried to maintain the integrity of the PC21 Final Determination as far as possible. We have therefore only amended output targets where:
 - a) the PC21 Final Determination noted that this would be required, for example:
 - (i) as a consequence of planned refinement of the newly established consumer measures by the consumer measure stakeholder group;
 - (ii) to account for the impact of the scope certainty exercise that we had asked NI Water to complete to clarify the needs and costs for the wastewater and sewerage investment subprogramme schemes; and,
 - (iii) to account for the outcome of a development objective we had asked NI Water to complete to confirm the number of properties affected by low water pressure issues.

² Objectives which are aimed at developing NI Water's capability to identify and balance investment priorities and maximise the benefits delivered to consumers over the longer term. Refer to PC21 Final Determination Main Report, commencing Paragraph 3.82, for further details.

- b) delivery of an output has carried over from PC15, to ensure that this is not seen as outperformance against PC21 investment.
- c) change controls have been agreed by stakeholders, and the associated allowances have been included in our determination.
- d) it is necessary to address errors and concerns we had in relation to the original targets submitted by NI Water for the PC21 period.
- e) planned development work has been completed and the associated development objective can therefore be closed.
- 3.5 The sections below identify the changes that we are making in the Mid-Term Review within this context.

Consumer measures

- 3.6 Section 3 of our PC21 Final Determination explained the work that had been undertaken by the CM/SAT Working Group³ (NI Water, CCNI, DfI and chaired by UR) on the development of alternative and more meaningful consumer measures and satisfaction surveys.
- 3.7 This resulted in the following changes to the metrics and targets that were adopted for the PC21 price control period:
 - Unwanted Contacts a new target measure which was introduced for PC21;
 - First Point of Contact Resolution (FPOCR) a new target measure which was introduced for PC21;
 - Net Promotor Score (NPS) a new target measure which was introduced for PC21;
 - Overall Performance Assessment (OPA) a previous target which was re-categorised as a 'semi-retired' measure and only to be monitored during PC21.
 - Re-categorisation of the following customer contact measures as 'semi-retired' measures which were only to be monitored during PC21:

³ The CM/SAT is the Customer Satisfaction sub-group that works under the Customer Engagement Oversight Group, with the purpose to identify issues to help inform the development of new measures of consumer service, and customer satisfaction. It is tasked with the development of alternative, and more meaningful, consumer measures and satisfaction surveys.

- ◆ DG6 (% of billing contacts dealt with within 10 working days),
- DG7 (% of written complaints dealt with within 10 working days); and
- ◆ DG9 (% of calls not abandoned).
- 3.8 Section 3 of our PC21 Final Determination also explained the proposals for the continued review of the PC21 measures by CM/SAT, as well as its consideration of the development of new measures.
- 3.9 CM/SAT has continued this work as planned, to identify further amendments which could be introduced at the Mid-Term Review. This is to make the PC21 consumer measures more relevant to NI Water, and its customers. The Mid-Term Review changes that have been agreed by the group are set out below.

Unwanted Contacts

- 3.10 Minor changes have been introduced to align the definition of the Unwanted Contacts Measure with Ofwat guidance. Private issues, third party issues, developer services, Dfl and managed processes will be excluded. Reporting unwanted telephone contacts for both domestic and non-domestic consumers will continue. There is also a correction to the reporting of 'run of water' and 'leak line' contacts. This will ensure the methodologies are consistent, with the first call reported as 'wanted' and subsequent calls reported as 'unwanted'. This also aligns with established guidance and good practice in England and Wales, and will make sure the measure only reflects service failures for which NI Water is responsible.
- 3.11 CM/SAT has agreed revised targets which take account of these changes. These are presented alongside the original targets in Table 3.1 below.

Consumer Measure	2024-25	2025-26	2026-27
FD – Unwanted Contacts	64,300	63,400	62,500
MTR – Unwanted Contacts	56,000	55,100	54,200

Table 3.1: Revised Unwanted Contact measure targets compared to original FD measure targets.

First Point of Contact Resolution (FPoCR)

3.12 CM/SAT has agreed to retain the FPoCR measure in its current format, and to leave the target of 84% unchanged for the PC21 period.

Net Promotor Score (NPS)

- 3.13 NPS is calculated from information gathered through Voice of the Customer surveys, conducted by an independent Customer Experience and Insight specialist. It captures the views of customers who have had dealings with the company, through the main contact centre, and other parts of the business.
- 3.14 For the Mid-Term Review, NPS has been changed from a measure which applies to both domestic and non-domestic customers, to a measure which only applies to domestic customers. It will be weighted equally between water and wastewater contacts. To account for this change, non-domestic consumer satisfaction will be measured separately through new measures, which will be developed through CM/SAT and introduced in PC27. This approach will help ensure the right outcomes for customers, by providing better visibility on performance for the different services that NI Water provides to domestic and non-domestic customers. It will also facilitate better comparisons with other UK water companies.
- 3.15 Targets for the new 'domestic only' measure have been agreed by CM/SAT and these are presented alongside the original targets for the combined measure in Table 3.2 below.

Consumer Measure	2024-25	2025-26	2026-27
FD – Net Promotor Score (NPS) (Domestic Non-domestic)	+42	+42	+42
MTR – Net Promotor Score (NPS) (Domestic)	+40	+41	+42

Table 3.2: Revised NPS measure targets compared to original FD measure targets.

Overall Performance Assessment

- 3.16 An Overall Performance Assessment (OPA) score has historically been used to assess NI Water's overall delivery of service to customers. This is a composite score which includes a broad range of measures covering service delivery in the areas of water supply, sewerage service, customer service and environmental performance.
- 3.17 CM/SAT has decided it is content for the Overall Performance Assessment (OPA) score used in previous price controls to be fully retired at the Mid-Term Review. This is because it is now considered to have limited use as:
 - comparisons with English and Welsh water companies are not possible, because OPA has not been reported by those companies since 2009-10:

- several individual OPA components have been superseded; and,
- many others are already consistently achieving the maximum possible OPA score.
- 3.18 In taking this decision, CM/SAT recognised that the majority of the components of the OPA measure already form part of the Annual Information Return. It has also been agreed that UR will make the minor adjustments necessary to ensure that all critical OPA component data is captured. This will ensure that a comparative year on year score can be calculated in the future if this is ever deemed necessary.

Semi-Retired Director General (DG4) Measures

- 3.19 CM/SAT has decided that there is no longer a need to report NI Water's performance for the semi-retired customer contact measures (i.e. billing contacts dealt with, response to written complaints and telephone calls not abandoned) after the Mid-Term Review.
- 3.20 NI Water will however continue to capture this data for the remainder of the PC21 period to allow it to be referenced if necessary.

Development of new Consumer Measures for PC27

- 3.21 CM/SAT has agreed to commence data collection and planning for the potential introduction of several new measures for the PC27 period. The consideration and development of these measures, which are detailed below, will continue over the remainder of PC21.
 - a) Internal Developer Services Bespoke Consumer Measure: CM/SAT has agreed that NI Water should aim to introduce a new metric at the start of PC27 to measure and report on customer experience of engaging with Developer Services. This will bring NI Water in line with companies in England, Scotland and Wales, who have already introduced specific measures which have a clear and tangible impact on the delivery of improvements.

⁴ This term dates back to the original privatisation of water in England and Wales (E&W) and regulation by the original Director General or 'DG'.

- b) Non-Domestic Net Promotor Score (NPS): There are concerns over the potential volatility of a Non-Domestic NPS measure due to the relatively low numbers of survey responses from business customers. CM/SAT has therefore decided to continue to monitor the Non-Domestic NPS throughout the remainder of PC21 to determine whether it is suitable for introducing as a target measure in PC27. Several potential options will be considered, including changing to a "range target" or a hybrid approach through the survey of non-domestic 'silent' customers.
- c) Consumer Vulnerability: CM/SAT discussed setting targets linked to increasing awareness of NI Water's Customer Care Register and for measuring the level of satisfaction of the support provided to consumers in vulnerable circumstances. However, due to concerns regarding availability of historical data, budget and the nature of services, it was agreed that the remaining PC21 period should be used to plan and set meaningful targets for PC27. This process will allow future outputs from UR's Best Practice Framework Programme to be taken into account. A high-level plan for Customer Care Register (CCR) targets was agreed. In the interim, NI Water will continue to track awareness of the CCR through the annual Omnibus Survey.
- d) Consumer Engagement: The PC21 Consumer Engagement development objective noted the potential to "undertake a consumer research and engagement review/appraisal at the mid-point of PC21". CM/SAT considered this to be addressed through its discussions and agreed there was no requirement for further research work at the mid-point of PC21. This will be considered further as part of the PC27 price control process.
- 3.22 CCNI has also highlighted a concern in terms of the visibility of NI Water's performance against the aims and promises, which are set out in the company's Codes of Practice. We anticipate that consideration of this, including how monitoring and reporting of NI Water's performance might be implemented, will also form part of the CM/SAT discussions for PC27.

Nominated Outputs

3.23 Nominated outputs are specific items, often identified by the quality regulators (NIEA and DWI), such as improvements to treatment works so that discharge standards meet mandatory legislative requirements. They also include a number of specific improvements that NI Water has identified

- as nominated outputs in its business plan, such as trunk main schemes and the provision of additional water storage capacity.
- 3.24 The PC21 Final Determination included a list of named priority outputs which NI Water was expected to deliver through its capital investment programme. In its Mid-Term Review submission, NI Water proposed that the following changes be made to the PC21 nominated output targets.

	NIW adjusted PC21 FD	Not needed	Deferral	New / Additional	NIW proposed revision
Trunk main schemes	14		3	1	12
Service reservoirs / Clear water tanks	4		1	1	4
Water treatment works schemes	20		1	15	34
Improvements to UIDs	136	14	33	13	102
Wastewater treatment work schemes	46	4			42
Economic constrained areas eased	12		2		10
Serious development restrictions eased	37		1		36

Table 3.3: NI Water's proposed changes to nominated output targets.

- 3.25 However, changes in planned capital investment occur in every price control. This may be a consequence of:
 - the clarification of need as investigations and studies into required solutions progress;
 - the impact of material cost variances; or,
 - the inability to deliver particular projects as a result of issues associated with other processes, such as achieving planning approval or purchasing land.
- 3.26 We have therefore decided to apply two different approaches for dealing with the nominated output changes set out in Table 3.3 above. We have accounted for some within this MTR process and will account for others through our established price control logging process at the end of PC21.

Nominated outputs dealt with through established logging process

3.27 When material changes in planned delivery occur, we normally use a logging up/logging down process to apply the necessary financial corrections retrospectively. This means that consumers and NI Water are not disadvantaged by any change that has occurred.

- 3.28 This logging process either 'benefits' the company through a positive Regulatory Capital Value (RCV) adjustment for outperformance, or 'penalises' it through a negative RCV adjustment for underperformance.
- 3.29 On the basis of this, and our MTR Draft Determination conclusion in relation to the evidence for Real Price Effects, we believe that the targets for any nominated outputs which are not linked to NI Water's scope certainty exercise should remain as they were in the PC21 Final Determination.
- 3.30 As a result, any variance in delivery for these measures will be accounted for using the standard logging up/logging down process.
- 3.31 The PC21 targets for trunk mains, service reservoir/clear water tanks and water treatment works have therefore not been amended, apart from accounting for any change control and any PC15 carry over, as detailed in Table 3.4 and Table 3.5 below:

	2021- 22	2022- 23	2023- 24	2024- 25	2025- 26	2026- 27	PC Total
FD – Trunk main schemes	0	2	1	5	2	4	14
MTR – Trunk main schemes	0	2	1	5	2	5 ¹	15

Note 1 One output added in 2026-27 to account for Unagh/Beltoy Pumping Station Change Control (CCP003).

Table 3.4: Utility Regulator's proposed adjustment of Trunk Main nominated output targets.

	2021- 22	2022- 23	2023- 24	2024- 25	2025- 26	2026- 27	PC Total
FD – Water treatment works schemes	1	0	5	4	1	8	19
MTR – Water treatment works schemes	1	2 ¹	5	4	1	8	21

Note 1 Two outputs added in 2022-23 to account for Dorisland WTW PC15 carryover and Derg WTW MCP Change Control (CCP001).

Table 3.5: Utility Regulator's proposed adjustment of WTW nominated output targets.

Nominated outputs adjusted in MTR

- 3.32 However, it is recognised that the provision for NI Water to make scope certainty submissions for significant elements of the wastewater and sewerage sub-programmes, as a consequence of them being insufficiently developed at the time of the PC21 Final Determination, was unusual.
- 3.33 It was clear at the outset, that this process had the potential to affect the solutions/costs and therefore the associated outputs. The remit of the

Note 2 NI Water proposed adding outputs for pilot plants. However, these are effectively replacing the existing PC21 targets for the completion of treatability studies. As the total number of PC21 outputs are broadly the same for each, we will account for change in delivery as part of our PC21 Outturn Report.

- associated development objective included in the PC21 Final Determination therefore acknowledged and reflected this.
- 3.34 The outputs associated with the scope certainty exercise have therefore been treated as sitting outside the standard logging up/logging down process and instead have been dealt with as part of this Mid-Term Review.
- 3.35 As a result, we have reviewed, and if necessary, revised them so that they are more reflective of the figures that would have been in the PC21 Final Determination if the relevant information had been available at that time.
- 3.36 For large wastewater treatment works and unsatisfactory intermittent discharges, we have reviewed and accepted the revised targets proposed by NI Water. The revisions reflect the following approach adopted by the company in its Mid-Term Review submission:
 - a) It removed several projects as a consequence of being able to prove from Integrated Environmental Modelling that the environmental need does not exist.
 - b) In cases where cost increases were overly disproportionate and no longer considered cost beneficial, it deferred schemes to PC27 to allow further modelling to be undertaken and lower cost solutions to be investigated in conjunction with NIEA.
 - c) It deferred projects considered undeliverable for engineering reasons.
 - d) Where possible, it included other 'substitution' projects to help offset the deferrals. However, the scale of the cost increases in the sub-programmes meant that bringing in 'substitute' schemes in all circumstances was unachievable.
- 3.37 Taking this approach for the Final Determination ensures that the wastewater treatment works, and unsatisfactory intermittent discharge outputs, align with our Mid-Term Review determination of the capital allowance required for the wastewater and sewerage sub-programmes.
- 3.38 Whilst this approach results in the number of outputs being slightly lower than in the PC21 Final Determination, we believe it remains consistent with Dfl's PC21 S&EG objective of establishing a deliverable investment plan which meets established needs and is affordable from a tariff perspective.
- 3.39 The minor changes to the targets for economic constrained areas and serious development restrictions proposed by NI Water have also been accepted and reprofiled to reflect PC21 delivery to date. This is on the basis

that they are associated with the changes to the number of wastewater treatment works and unsatisfactory intermittent discharge upgrades being delivered.

3.40 Table 3.6, Table 3.7 and Table 3.8 below show the nominated outputs changes that we intend making in the Mid-Term Review as a consequence of the outcome of the scope certainty exercise completed by NI Water and any PC15 carry over. The annual targets incorporate some re-profiling of the revised totals.

	2021- 22	2022- 23	2023- 24	2024- 25	2025- 26	2026- 27	PC Total
FD – Improvements to UIDs	7	21	21	13	25	49	136
MTR – Improvements to UIDs	4	3	4	29	23	39	102¹

Note 1 14 UIDs have been identified as not needed, 33 UIDs have been deferred for further investigation, 13 new UIDs have been added. The revised PC21 total has been re-profiled across the price control period.

Table 3.6: Utility Regulator's proposed adjustment of Unsatisfactory Intermittent Discharge (UID) nominated output targets.

	2021- 22	2022- 23	2023- 24	2024- 25	2025- 26	2026- 27	PC Total
FD – Wastewater treatment work schemes	0	5	16	3	7	14	45
MTR – Wastewater treatment work schemes	1	6	4	2	10	19	42 ¹

Note 1 One output added in 2021-22 to account for Ballykelly WwTW PC15 carryover; one output identified as not needed in 2023-24 (Kilkeel WwTW), three outputs identified as not needed in 2026-27 (Culmore WwTW, Larne, Kilkeel WwTW, Carrickfergus WwTW). The revised PC21 total has been re-profiled across the price control period.

Table 3.7: Utility Regulator's proposed adjustment of WwTW nominated output targets.

	2021- 22	2022- 23	2023- 24	2024- 25	2025- 26	2026- 27	PC Total
FD – Economic constrained areas eased	0	0	0	2	1	9	12
MTR – Economic constrained areas eased	0	0	0	3 ¹	1 ²	6	10
FD – Serious development restrictions eased	4	0	0	8	9	16	37
MTR – Serious develop restrictions eased	0	6	2	6	83	14	36

Note 1 One output (Enniskillen) removed from 2024-25.

Note 2 One output (Newry) removed from 2025-26.

Note 3 One output (Maghera) removed from 2025-26.

Table 3.8: Utility Regulator's proposed adjustment of Economic Constrained Area and Serious Development Restriction nominated output targets.

3.41 NI Water also asked for the definition of the targets for economic constrained areas and serious development restrictions to be changed from 'removed' to 'eased'.

- 3.42 This is because 'removal' would require all unsatisfactory intermittent discharges in a catchment to be addressed and it is recognised that it will take several price controls before this is achieved.
- 3.43 We have therefore accepted this change in definition as we believe it more accurately reflects the original intention of the target and removes the potential for any misinterpretation in relation to what is being delivered by the investment in PC21.
- 3.44 In our Draft Determination we noted that NI Water's MTR submission had not proposed any adjustments to its wastewater treatment percentage compliance targets (i.e. for works and population equivalent) to reflect the change in the number of nominated outputs and that there may be a need to address this for the Final Determination.
- 3.45 We have therefore completed a simplified analysis to determine the effect that the adjustment and reprofiling of wastewater treatment work schemes has on the annual compliance targets. The updated targets are presented in Table 3.9 and Table 3.10, along with the original targets. It can be seen that the impact of the changes to the wastewater treatment works delivery programme are small.

	2021- 22	2022- 23	2023- 24	2024- 25	2025- 26	2026- 27
FD – % of WwTWs discharges compliant with numeric consents	92.05	91.63	92.33	93.26	93.72	94.14
MTR – % of WwTWs discharges compliant with numeric consents	92.05	91.63	92.33	92.84	93.31	94.12

Table 3.9: Utility Regulator's proposed adjustment of % of WwTWs discharges compliant with numeric consents.

	2021- 22	2022- 23	2023- 24	2024- 25	2025- 26	2026- 27
FD – % of total p.e. served by WwTWs compliant with numeric consents	99.18	94.65	94.65	95.71	95.72	95.77
MTR – % of total p.e. served by WwTWs compliant with numeric consents	99.18	94.65	94.65	95.59	95.63	95.73

Table 3.10: Utility Regulator's proposed adjustment of % of total p.e. served by WwTWs compliant with numeric consents.

Other PC21 MTR output adjustments

3.46 We have amended a limited number of other output targets at the Mid-Term Review as a consequence of the rebasing of company data and plans and to correct for errors in the original business plan submission. Further details, including the rationale for making the changes, are provided below.

Properties at risk of low pressure (DG2)

- 3.47 NI Water maintains a DG2 register of properties that are at risk of low pressure, which helps it to target investment to deliver the maximum benefit for consumers.
- 3.48 In its PC21 business plan submission, NI Water highlighted concerns that the information on its DG2 register might be underrepresenting the number of properties experiencing low pressure.
- 3.49 Therefore, we included a development objective in our PC21 Final Determination requiring the company to undertake the necessary modelling and investigations to confirm the number of properties affected.
- 3.50 This development objective was aimed at improving the quality and confidence of NI Water's data to provide a more robust basis for setting targets and delivering improvements for customers moving forward.
- 3.51 Our PC21 Final Determination noted that the PC21 low pressure targets would potentially need to be revised at the Mid-Term Review, as a consequence of the completion of this work.
- 3.52 The company completed its DG2 register update in August 2022. This resulted in the number of recorded low pressure properties increasing from c600 to c1,900.
- 3.53 In its PC21 Mid-Term Review submission the company proposed changes to its low-pressure targets based on the revised number of properties registered.
- 3.54 As part of our Mid-Term Review assessment, we asked the Reporter to check if NI Water's approach to the 'refresh' of the register had been undertaken in accordance with the reporting guidance and industry best practice. The Reporter was also asked to confirm if the revised numbers represented a reasonable basis for setting targets moving forward and to propose revised targets for the remainder of the PC21 period if this was found to be the case.
- 3.55 Following engagement with company, the Reporter advised that NI Water was broadly compliant with the relevant guidance. The Reporter found that the associated business as usual processes were being conducted by a dedicated team that had good technical knowledge of the subject area, the geography of the water supply area and the delivery of operations/schemes related to the DG2 low pressure performance metric.

- 3.56 However, the Reporter also noted some concerns in relation to NI Water's data and methodology. Most notably, the need to employ technology and systems which are more aligned to industry best practice, and in particular, the need to establish ongoing logging and analysis to monitor pressures across the network. The Reporter suggested that these could have negated the need for the register 'refresh' in the first place and would provide much greater granularity of data, in terms of the location and timing of low pressure issues.
- 3.57 The Reporter's review of the revised targets submitted by NI Water for 'removals by company action', concluded that they were lower than might have been expected based on the outcome of the register 'refresh'. NI Water has since agreed to increase its annual targets accordingly.
- 3.58 The revised Mid-Term Review targets for the number of low pressure properties removed by company action and the total number of low pressure properties on the register, are presented in Table 3.11 and Table 3.12 below, along with the original PC21 targets and 'actuals' delivered in the first two years of PC21.

	2021- 22	2022- 23	2023- 24	2024- 25	2025- 26	2026- 27
FD – DG2 Properties at risk of low pressure removed from the risk register by company action	147	145	143	139	137	135
MTR – DG2 Properties at risk of low pressure removed from the risk register by company action	176 ¹	143 ¹	200	158	188	263

Note 1 Actual delivered by NI Water to date.

Table 3.11: Revised targets for the number of low pressure (DG2) properties removed by company action.

	2021- 22	2022- 23	2023- 24	2024- 25	2025- 26	2026- 27
FD – DG2 Properties receiving pressure below the reference level at end of year	492	427	365	306	250	195
MTR – DG2 Properties receiving pressure below the reference level at end of year	1,715 ¹	1,780 ¹	1,642	1,534	1,396	1,183

Note 1 Actual delivered by NI Water to date.

Table 3.12: Revised targets for total number of low pressure (DG2) properties.

Impermeable surface water area

3.59 Targets for the impermeable surface water area removed from the combined sewerage network have been adjusted to account for an incorrect conversion factor applied by NI Water in its PC21 business plan submission. This was in error by a factor of 10.

- 3.60 This amendment addresses a concern we originally raised with NI Water during the PC21 determination process. It has no implications for funding as the allowance requested by NI Water in its business plan submission was based on the delivery of the lower 'corrected' impermeable surface area that is now reflected in the Mid-Term Review targets.
- 3.61 The revised Mid-Term Review targets are shown in Table 3.13 below, along with the original PC21 targets and 'actuals' delivered in the first three years of PC21.

	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
FD – Impermeable surface water area (m²)	364,540	364,540	364,540	364,540	364,540	364,540
MTR – Impermeable surface water area (m²)	1,200 ¹	91,898 ¹	137,676 ¹	36,454	36,454	36,454

Note 1 Actual delivered by NI Water to date.

Table 3.13: Impermeable surface water area removed.

Power derived from renewable sources

- 3.62 Targets for the percentage of NI Water's power usage derived from renewable sources have been re-profiled to align with NI Water's Climate Strategy.
- 3.63 NI Water's Climate Strategy was developed after the company submitted its PC21 business plan to take account of the aims of the Department for the Economy's (DfE) Energy Strategy, which was not finalised until after the PC21 Final Determination.
- The amendment of the targets addresses concerns we expressed in our PC21 Final Determination, in relation to NI Water setting a closing target of 100% in advance of the publication of the Energy Strategy, and the implications this might have in terms of power purchase costs.
- 3.65 This change has no adverse implications. It does not affect PC21 funding or the PC21 proposals relating to self-generation as almost all of NI Water's renewable energy is purchased from others. It will however help ensure that NI Water can continue to purchase its renewable energy at an efficient cost to the benefit of consumers by avoiding this self-imposed target becoming a driver for increased costs as a consequence of the significant increase in the cost of Renewable Energy Guarantees of Origin (REGO).
- 3.66 Details of the original and revised targets are shown in Table 3.14 below.

	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
FD – percentage of NI Water's power usage derived from renewable sources (%)	45	45	50	50	75	100
MTR – percentage of NI Water's power usage derived from renewable sources (%)	45	45	50	50	50	50

Note 1 95% of power usage derived from renewable sources is purchased and 5% is self-generated.

Table 3.14: Percentage of power usage derived from renewable sources.

WwTWs Upgraded to Comply with Pollution Prevention & Control (PPC) Regulations

- 3.67 In its response to our MTR Draft Determination, NI Water asked for the description of this target to be changed to "WwTWs assessed and/or upgraded if required to comply with PPC Regulations" as it more accurately reflects the process undertaken and its potential outcomes, as summarised below:
 - a) Assess whether the WwTW requires a PPC permit (with sludge production >50m3/day);
 - b) Confirm if permitted sites require upgrades in order to comply with the PPC permit; and,
 - c) Undertake upgrades necessary for compliance with the PPC permit if required.
- 3.68 Having considered NI Water's rationale, we have decided to make this change as the revised text reflects the fact that some of the assessments at the qualifying sites might determine that no upgrades are required.

Development outputs

- 3.69 The Final Determination for PC21 included 25 key development objectives which cover areas of improvement that cannot necessarily be monitored using numerical targets. They are intended to help ensure NI Water develops its planning capability, and introduces new techniques to improve this, and the service delivered to consumers over the longer term.
- 3.70 The development objective list for PC21 included areas where we considered development to be necessary to justify the need for investment in the second half of the price control period, and to support NI Water's preparation of its PC27 business plan submission.
- 3.71 For the Mid-Term Review we have:

- Assessed business cases submitted by NI Water for those objectives where approval for continued investment for the remainder of the period was dependent on proof of benefit;
- Assessed NI Water's progress in delivering all the PC21
 development outputs, using the annual progress updates submitted
 as part of NI Water's annual information return. In doing so, we
 considered the extent to which specific milestones had been met.
 We also considered whether sufficient progress is being made to
 deliver the objective in PC21 and, where appropriate, support the
 NI Water's PC27 submission; and,
- Decided whether any development outputs are substantially complete and can therefore be closed at the Mid-Term Review.
- 3.72 Further information on our development objective assessments and conclusions are provided below.

Smart Metering

- 3.73 As part of their PC21 Business Plan submission, NI Water proposed embarking on a smart metering programme for non-domestic customers.
- 3.74 The company's initial PC21 proposal for a 'big bang' strategy, whereby all dumb meters were replaced by smart meters over an 18-month period, was not accepted by us due to a range of concerns in relation to the justification presented by the company such as the deliverability of the project, the potential inaccuracy of the project costs and the lack of the longer term cost benefit analysis.
- 3.75 It was instead agreed that NI Water could implement a business as usual (BAU) proposal. This proposal was that non-domestic dumb meters would be replaced by either a drive-by (AMR)⁵ meter or fully smart (AMI)⁶ meter when they reached end of life or failed. Continued investment over the whole price control period was dependent on this being proven to be an appropriate and cost beneficial programme of work.
- 3.76 We therefore introduced a PC21 development objective, which required NI Water to:

⁵ AMR – Automatic Meter Reading (drive by or walk by requiring a meter reader using Bluetooth to capture readings) considered an upgrade rather than fully smart.

⁶ AMI – Advanced Metering Infrastructure a 'fully smart' option which allows for usage and more detailed information to be transferred to a receiver rather than in-situ personnel to obtain a reading.

- use the information gathered from its installation programme in the first half of PC21 to prove its smart metering concept,
- identify the most suitable technology, and
- develop a cost benefit analysis (CBA) for consideration at the Mid-Term Review.
- 3.77 The purpose was for NI Water to prove that the move away from dumb meters was beneficial from an operational and cost perspective.
- 3.78 The CBA submitted by NI Water in the Mid-Term Review proposed that 90% of the replacements should be AMR drive-by meters. This was primarily for areas where installation of the technology to support fully smart AMI meters would not be cost beneficial. It also proposed that 10% should be AMI meters, primarily in urban areas where the installation of the support technology is more cost effective and cost beneficial.
- 3.79 NI Water's CBA identified savings in the region of £1m over the 17-year period considered, when other benefits of smart metering such as leakage reduction, consumption reduction and revenue protection⁷, were considered.
- 3.80 As part of our assessment of NI Water's PC21 submission we asked our engineering consultants to review the company's CBA. This included the methodology employed, the assumptions made, the choice of technology proposed and the submitted costs.
- 3.81 The consultants concluded that, despite several shortcomings in the CBA approach/methodology applied by the company, the switch from dumb meters to drive-by meters (as a minimum), represented a positive operational development.
- 3.82 The consultants also concluded that '...the continuation of smart metering (and meter upgrades) as currently proposed would be considered cost beneficial', noting that the company had been conservative in its consideration of the broader benefits that might be delivered.
- 3.83 The PC21 Final Determination allowance has therefore not been adjusted in this Mid-Term Review.
- 3.84 We however plan to engage further with the company on its approach to assessing the costs and benefits of smart metering for PC27, taking account of our engineering consultant's comments and recommendations.

⁷ Detection & prevention of misuse of Domestic supply for non-domestic purposes e.g., Dom/Agri supplies via AMR logging data.

Leakage

- 3.85 In its PC21 business plan submission, NI Water proposed a leakage reduction profile which would deliver the sustainable economic level of leakage (SELL) of 149.98Mld by the end of the price control period. We accepted the PC21 targets submitted by the company on the basis of this assessment, which had been undertaken in 2019.
- The PC21 Final Determination included allowances for innovative technology trials, intended to help NI Water reduce leakage and meet its targets. However, because of the innovative nature of the proposals, a development objective was included for NI Water to report on the outcome of the trials as part of its annual information return, so that we could consider if continued funding beyond the Mid-Term Review made economic sense.
- 3.87 The leakage innovation technologies trialled by NI Water include:
 - Acoustic logging;
 - Satellite imagery; and,
 - New equipment Ground Penetrating Radar/Gas/Drones.
- 3.88 NI Water has reported that certain technologies are proving more successful than others. For example, satellite imagery is delivering a higher success rate than FIDO acoustic loggers. The trials involving this new technology and equipment are still ongoing and we have decided to retain the associated allowances for the remainder of the PC21 period to allow a full range of options and opportunities to be explored. This will allow NI Water to fully assess the benefits of each technology and to develop an evidence-based investment proposal for PC27.
- 3.89 The PC21 Final Determination also included a requirement for NI Water to update its SELL assessment, so that the amendment of leakage reduction targets could be considered at the Mid-Term Review, if there was a material change. The revised SELL figure of 149.28Ml/d that NI Water derived through this reassessment was almost identical to the previous 2019 figure, that the PC21 targets were based on, and so it has not been necessary to make any changes at the Mid-Term Review.

Closure of completed Development Outputs

3.90 NI Water's Mid-Term submission proposed that seven of the 25 PC21 development objectives should be closed at the Mid-Term Review, because NI Water considered them to be complete. These are listed in Table 3.15 below.

Development output	Description			
1	Consumer engagement			
2	Consumer Protection/ Care Register			
5	Refresh of DG2 Register			
9	WwPS / CSO Quality (UID) and WwPS (Capacity increase)			
11	Cranfield Catchment, Kilkeel Storm Separation			
24	Smart Meters			
25	Addressing scope uncertainty for the Mid-Term Review			

Table 3.15: Development Outputs proposed for closure by NI Water in its MTR submission.

- 3.91 In our Draft Determination we advised that we agreed with NI Water's assessment for the majority of these objectives, and planned to close all of them in the MTR, apart from two consumer focused outputs. The rationale for keeping the two consumer development objectives open is detailed below.
 - Objective 1 relates to the development of consumer measures and consumer engagement. In this case, we think that there would merit in retaining an oversight of developments for the remainder of the PC21 period, as a consequence of the potential need to undertake consumer engagement for the PC27 price control, and establish targets for any new consumer measures that are due to be introduced.
 - Objective 2 relates to activities linked to consumer protection and the consumer care register. In this case, we think that there would merit in retaining an oversight of developments during the remainder of the PC21 period, as a consequence of the recent publication of UR's Consumer Protection Programme decision paper, and the need for companies to implement requirements associated with this.
- 3.92 In its response to our Draft Determination, NI Water accepted our decisions on the original seven objectives that formed part of its MTR submission. However, it also proposed that a further three objectives be closed as a result of the completion of ongoing work since its submission was made. These are listed in Table 3.16 below:

Development output	Description
18	Culmore DA KL554 - Skeoge Link Road
19	Living with Water Programme (LWWP) Networks
20	Living with Water Programme (LWWP) WwTW

Table 3.16: Further Development Outputs proposed for closure by NI Water in its MTR Draft Determination response.

3.93 We have considered the rationale for closure submitted by NI Water in its Draft Determination response and agree that the development activities linked to this investment have now been completed. As result we will now be closing a total of eight development objectives at the MTR (i.e. Objectives 5, 9, 11, 18, 19, 20, 24 and 25)

Serviceability

- 3.94 Our primary mechanism for assessing the sufficiency of NI Water's base maintenance allocation, and whether it is maintaining its assets effectively, is our serviceability assessment. This considers trends for a range of primary and secondary performance indicators for above and below ground water and wastewater assets.
- 3.95 Annex F of our PC21 Final Determination explained the assessment process, the outcome of our assessment and the performance bands chosen for monitoring performance during the price control period.
- 3.96 We assess actual performance against the serviceability performance bands each year for our annual cost and performance report. This assessment considers whether the performance for individual indicators is stable, improving, deteriorating or marginal across the four different service areas and allows us to conclude whether serviceability is being maintained overall.
- 3.97 We have updated our serviceability assessment for the Mid-Term Review using the updated information and longer data trends received in the NI Water's 2022-23 annual information return. Our assessment shows that serviceability has remained stable in all service areas as demonstrated by the selected trends for the primary indicators presented in Figure 3.1 below. In this figure, a line that remains broadly 'horizontal' at around 100% indicates 'stability', a falling trend indicates improvement, and a rising trend indicates deterioration.

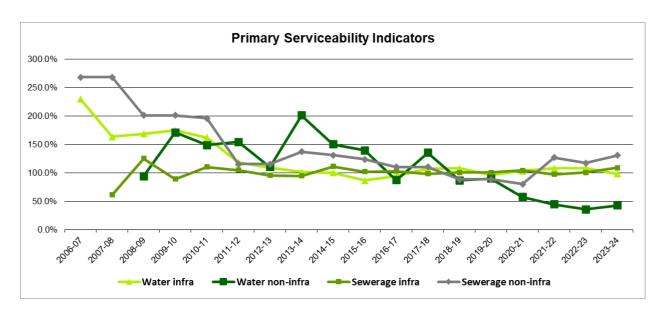


Figure 3.1: Primary Serviceability Indicators.

- 3.98 The updated data trends have largely remained within the control limits set for each indicator in the PC21 Final Determination, and the reference levels remain broadly reflective of performance. We have therefore concluded that there is no need to change these at the Mid-Term Review, and they will be 'refreshed' in the PC27 determination process using the additional data captured during PC21.
- 3.99 This serviceability assessment also provides an indication that the capital maintenance allowance included in the PC21 Final Determination is sufficient, which supports our decision not to adjust this at the Mid-Term Review.

Delivery of Social and Environmental Priorities

- 3.100 Our price control determinations are intended to establish the funding required by NI Water to meet the priorities contained within Dfl's S&EG.
- 3.101 However, at the time of the PC21 Final Determination there were large elements of the wastewater treatment and sewerage programmes which could not be determined, as solutions were insufficiently developed.
- 3.102 A 'holding' allowance for these schemes was therefore included and plans were put in place for the finalised solutions to be submitted by NI Water at a later date for determination at the Mid-Term Review. It was understood at the time that this 'scope certainty' exercise would likely change the PC21 capital funding requirement and associated outputs.
- 3.103 This exercise has now been completed, and we have adjusted the PC21 investment plan, allowances and associated outputs accordingly. We

- consider that the overall outcome of the Mid-Term Review process, including the 'scope certainty' exercise, remains aligned with the aim of the S&EG of formulating a deliverable investment plan which meets established needs and is affordable from a tariff perspective.
- 3.104 NI Water made good progress in the delivery of its PC21 requirements in the first two years of the price control, when fully funded. We consider that fully funding the plan continues to represent the best outcome for consumers and the environment. It would help avoid delays in the planned delivery of environmental compliance, the release of development constraints and the delivery of a more sustainable and efficient service. It would also avoid the transfer of responsibility and risk away from the company to others, including Dfl and consumers.
- 3.105 We will report on NI Water's delivery against the aims of the S&EG at the end of the PC21 period, reflecting on the impact that any funding allocations might have had, as part of that process.

PC21 Mid-Term Review output summary

3.106 Table 3.18 below provide a complete summary of the updated list of PC21 key output targets. These tables take account of the proposed changes described above.

Dic2 Properties at risk of low pressure removed from the risk register by company action 115 1761 1432 200 158 188 2 2 2 Dic2 Properties receiving pressure below the reference level at end of year 1 115 1761 1,780 1,842 1,534 1,396 1, 3 3 Dic3 Supply interruptions > 12hrs (urplanned and unwarned) % 0.088 0.091 0.087 0.084 0.080 0.077 0.75 0.72 0.084 0.083 0.097 0.084 0.080 0.087 0.084 0.080 0.077 0.75 0.72 0.084 0.084 0.080 0.077 0.75 0.72 0.084 0.084 0.080 0.077 0.75 0.72 0.084 0.084 0.080 0.087 0.084 0.080 0.077 0.75 0.72 0.084 0.084 0.080 0.087 0.084 0.080 0.087 0.084 0.080 0.077 0.75 0.72 0.084 0.084 0.080 0.087 0.084 0.080 0.077 0.75 0.72 0.084 0.080 0.087 0.084 0.080 0.077 0.75 0.72 0.084 0.084 0.080 0.077 0.75 0.72 0.084 0.084 0.080 0.077 0.75 0.72 0.084 0.084 0.080 0.087 0.084 0.080 0.077 0.75 0.72 0.084 0.084 0.084 0.080 0.077 0.75 0.72 0.084 0.084 0.084 0.084 0.084 0.084 0.087 0.084 0.08	Line	description	Units	PC15			PC	21		
1 Company action 11-15 17-6 11-3 20.0 155 188 2 2 2 2 2 2 2 2 2	Α	Consumer Service		2019-20	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
3 DG3 Supply interruptions > 12hrs (urplanned and unwarned)	1		nr	115	176¹	143¹	200	158	188	263
4 DG3 Supply interruptions (overall performance score) 5 DG8 % metered customers received bill based on a meter reading 6 Unwanted contacts 7 First Point of Contact Resolved (FPOCR) 8 90 84 84 84 84 84 84 84 84 84 84 84 84 84	2	DG2 Properties receiving pressure below the reference level at end of year	nr	626	1,715¹	1,780¹	1,642	1,534	1,396	1,183
5 D88 % metered customers received bill based on a meter reading	3	DG3 Supply interruptions > 12hrs (unplanned and unwarned)	%	0.088	0.091	0.087	0.084	0.080	0.077	0.073
6 Unwanted contacts	4	DG3 Supply interruptions (overall performance score)	nr	0.79	0.81	0.79	0.77	0.75	0.72	0.70
7 First Point of Contact Resolved (FPOCR)	5	DG8 % metered customers received bill based on a meter reading	%	99.5	99.0	99.0	99.0	99.0	99.0	99.0
8 Net Promoter Score	6	Unwanted contacts	nr	67,013	67,000	66,100	65,200	56,000	55,100	54,200
9 Total Leakage	7	First Point of Contact Resolved (FPOCR)	%	90	84	84	84	84	84	84
10 Security of supply index 11 Percentage of NI Water's power usage derived from renewable sources 11 Percentage of NI Water's power usage derived from renewable sources 12 Woverall compliance with drinking water regulations 13 Woverall compliance with drinking water regulations 13 Woverall compliance at consumers tap 14 Wiron compliance at consumers tap 15 Water mains activity - Length of new, renewed or relined mains 16 Water mains activity - Length of new, renewed or relined mains 17 Completion of nominated trunk main schemes 18 Completion of nominated water treatment works schemes 19 Completion of nominated improvements to increase the capacity of service 19 Percentage of NI Water mains activity - Length of new, renewed or relined mains 10 0 2 1 5 2 11 0 0 0 3 1 12 Vater non-infrastructure serviceability 19 Serviceability 20 Water infrastructure serviceability 21 Water non-infrastructure serviceability 22 Number of lead communication pipes replaced 23 Number of school visits 24 Number of events 25 Number of eatchments where management plan recommendations have been pressed to the pressure of	8	Net Promoter Score	nr	42	42	42	42	40	41	42
11 Percentage of NI Water's power usage derived from renewable sources	9	Total Leakage	MI/d	161	157	156	154	153	151	150
B Quality Water 12 % overall compliance with drinking water regulations	10	Security of supply index	nr	100	100	100	100	100	100	100
12 % overall compliance with drinking water regulations	11	Percentage of NI Water's power usage derived from renewable sources	%	44	45	45	50	50	50	50
13 % compliance at consumers tap 14 % iron compliance at consumers tap 15 % Service Reservoirs with coliforms in >5% samples 16 Water Outputs 17 Completion of nominated trunk main schemes 18 Completion of nominated water treatment works schemes 19 Completion of nominated improvements to increase the capacity of service 19 Period Service Beservoirs and clear water tank 10 O O O O O O O O O O O O O O O O O O O	В	Quality Water								
14 % iron compliance at consumers tap % 98.89 98.62 </td <td>12</td> <td>% overall compliance with drinking water regulations</td> <td>%</td> <td>99.90</td> <td>99.83</td> <td>99.83</td> <td>99.83</td> <td>99.83</td> <td>99.83</td> <td>99.83</td>	12	% overall compliance with drinking water regulations	%	99.90	99.83	99.83	99.83	99.83	99.83	99.83
15 % Service Reservoirs with coliforms in >5% samples	13	% compliance at consumers tap	%	99.84	99.74	99.74	99.74	99.74	99.74	99.74
C Water Outputs 16 Water mains activity - Length of new, renewed or relined mains	14	% iron compliance at consumers tap	%	98.89	98.62	98.62	98.62	98.62	98.62	98.62
16 Water mains activity - Length of new, renewed or relined mains	15	% Service Reservoirs with coliforms in >5% samples	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17 Completion of nominated trunk main schemes 18 Completion of nominated water treatment works schemes 19 Completion of nominated improvements to increase the capacity of service 19 Pervice and clear water tank 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	С	Water Outputs								
18 Completion of nominated water treatment works schemes nr 1 1 2 5 4 1 19 Completion of nominated improvements to increase the capacity of service reservoirs and clear water tank D Serviceability 20 Water infrastructure serviceability Text Stable S	16	Water mains activity - Length of new, renewed or relined mains	km	149	139.7	139.7	139.7	139.7	139.7	139.7
Completion of nominated improvements to increase the capacity of service reservoirs and clear water tank D Serviceability Water infrastructure serviceability Text Stable Stab	17	Completion of nominated trunk main schemes	nr	0	0	2	1	5	2	5
Perservoirs and clear water tank Discrete Stable S	18	Completion of nominated water treatment works schemes	nr	1	1	2	5	4	1	8
20 Water infrastructure serviceability Text Stable	19		nr	1	1	0	0	0	3	0
21 Water non-infrastructure serviceability E PC15 Additional Output Measures 22 Number of lead communication pipes replaced nr 1,781 1,844 1,	D	Serviceability								
E PC15 Additional Output Measures 22 Number of lead communication pipes replaced nr 1,781 1,844 1,84	20	Water infrastructure serviceability	Text	Stable						
22 Number of lead communication pipes replaced nr 1,781 1,844 1,8	21	Water non-infrastructure serviceability	Text	Stable						
23 Number of school visits nr 229 176 176 176 176 1 24 Number of events nr 143 57 57 57 57 57 57 57 57 57 57 57 57 57	Е	PC15 Additional Output Measures								
24 Number of events nr 143 57 57 57 57 57 57 57 57 57 57 57 57 57	22	Number of lead communication pipes replaced	nr	1,781	1,844	1,844	1,844	1,844	1,844	1,844
F PC21 Additional Output Measures Number of catchments where management plan recommendations have been provided by the provid	23	Number of school visits	nr	229	176	176	176	176	176	176
Number of catchments where management plan recommendations have been nr n/c 0 3 4 5 5	24	Number of events	nr	143	57	57	57	57	57	57
	F	•								
	25	· · · · · · · · · · · · · · · · · · ·	nr	n/c	0	3	4	5	5	3
26 Number of treatability studies completed nr n/c 0 0 0 12 0	26	Number of treatability studies completed	nr	n/c	0	0	0	12	0	0

Note 1 Actual figures have been quoted for these years due to the correction or rebasing of the targets for these measures. This is considered more meaningful in this circumstance.

Table 3.17: Water Provision and Service Output Targets - MTR.

Line	description	Units	PC15			PC	21		
Α	Consumer Service Sewerage		2019-20	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
1	DG5 Properties at risk of flooding - number removed from the 2 in 10, 1 in 10 and 1 in 20 risk register by company action	nr	1	0	0	20	6	10	21
2	DG5 Properties on the 2 in 10, 1 in 10 and 1 in 20 risk register at the end of the year	nr	119	120	123	106	103	96	78
В	Quality Sewerage								
3	% of WwTWs discharges compliant with numeric consents	%	94.90	92.05	91.63	92.33	92.84	93.31	94.12
4	% of total p.e. served by WwTWs compliant with numeric consents	%	99.50	99.18	94.65	94.65	95.59	95.63	95.73
5	Small WwTW compliance (works greater than or equal to 20p.e. but less than 250p.e.)	%	89.29	90.76	91.09	93.07	95.05	97.03	99.01
6	Number of high and medium pollution incidents attributable to NI Water	nr	13	12	11	10	9	8	7
С	Sewerage Outputs								
7	Sewerage activity - Length of sewers replaced or renovated	km	18.5	10.1	10.1	10.1	10.1	10.1	10.1
8	Delivery of improvements to nominated UIDs as part of a defined programme of work	nr	3	4	3	4	29	23	39
9	Delivery of improvements to nominated WwTWs as part of a defined programme of work	nr	2	1	6	4	2	10	19
10	Small wastewater treatment works delivered as part of the rural wastewater investment programme	nr	9	6	6	6	6	6	6
D	Serviceability								
11	Sewerage infrastructure serviceability	Text	Stable	Stable	Stable	Stable	Stable	Stable	Stable
12	Sewerage non-infrastructure serviceability	Text	Stable	Stable	Stable	Stable	Stable	Stable	Stable
E	PC15 Additional Output Measures								
13	Number of CSO and EO discharges at which event and duration monitoring equipment is installed/fully optimised, and meet NIEA requirments	nr	37	66	67	117	166	166	162
14	Number of qualifying Wastewater Treatment Works assessed and/or upgraded if required to comply with PPC Regulations	nr	7	0	0	4	3	4	4
15	Impermeable surface water collection area removed from the combined sewerage network (such as roads and pavements, roofs and hardstandings)	m ²	59,586	1,200¹	91,8981	137,676¹	36,454	36,454	36,454
16	Number of 'sustainable solution' WWTW serving a PE ≥ 250 delivered as part of the defined programme of work for improvements to nominated WWTWs	nr	0	0	0	0	1	1	2
17	Number of 'sustainable solution' WWTW serving a PE < 250	nr	0	0	0	0	1	1	1
F	PC21 Additional Sewerage Output Measures								
18	Number of Economic Constraint Areas Eased	nr	n/c	0	0	0	3	1	6
19	Number of Serious Development Restrictions Eased	nr	n/c	0	6	2	6	8	14

Note 1 Actual figures have been quoted for these years due to the correction or rebasing of the targets for these measures. This is considered more meaningful in this circumstance.

Table 3.18: Sewerage Provision and Service Output Targets - MTR.

4. Operating Expenditure

NI Water's Revenue Claim

- 4.1 Our PC21 Final Determination outlined our proposals for the PC21 Mid-Term Review, including the extent and scope of the work that we anticipated undertaking. For operating expenditure, we indicated that we were not minded to reopen the financial determination to reconsider operational cost efficiency or general changes in operational expenditure, such as unit rates for power or changes in labour or contractor costs.
- 4.2 This is based on the principle that the risks associated with these issues should remain with the company to manage over the duration of a six-year price control. This approach helps ensure that the timing of a Mid-Term Review does not have an impact on how the company plans and delivers efficiency. It also ensures that the Mid-Term Review is not driven by short term changes in key unit rates which might be reversed during the remainder of the price control.
- 4.3 In our Mid-Term Review Approach, we advised that our minded to position in relation to operational cost efficiency had not changed. However, we acknowledged that the company's power costs had increased significantly since the PC21 Final Determination and that we would consider how these additional costs should be dealt with for the remainder of the PC21 period, including the impact they might have on tariffs. We also said that we would consider other material cost pressures, such as increased chemical costs on the basis of any evidence submitted by the NI Water.
- 4.4 In May 2023, NI Water notified us of its intention to seek a review of K-Factors as a consequence of the financial pressures currently being faced, such as the significant increase in power costs.
- 4.5 In its PC21 Mid-Term Review submission, NI Water included the Revenue adjustment claim shown in Table 4.1 below, which it estimated equated to an overall annual Weighted Average Charge Increase (WACI) of 4.3% in real terms. This means that, on average, customer tariffs would increase by a maximum of 4.3% in real terms in each of the final three years of the PC21 period.

MTR Revenue Claim (2018-19 £m)	2024-25	2025-26	2026-27	PC21
Power	+24.01	+20.51	+18.32	+62.84
Chemicals	+2.63	+2.63	+2.63	+7.89
Cloud Implementation	+8.77	+2.99	+0.57	+12.33
Rates	(7.42)	(7.42)	(7.42)	(22.26)
PPP	(2.64)	(2.25)	(2.59)	(7.48)
Insurance	+1.08	+1.10	+1.10	+3.16
Efficiency Adjustment	(0.54)	(0.75)	(0.72)	(2.02)
Tax	(1.84)	(0.01)	-	(1.85)
Sub Total – adjusted building blocks	+24.01	+16.75	+11.84	+52.60
Revenue Over recovery (from years 1-3) ²	(4.41)	(4.41)	(4.41)	(13.23)
Opex under recovery (from years 1-3 pressures) ²	+21.92	+21.92	+21.92	+65.75
Tax (from years 1-3) ²	(1.28)	(1.28)	(1.28)	(3.83)
Reduction in Alpha credit	+3.71	+3.71	+3.71	+11.13 ³
Sub Total – Other Revenue Adjustments	+19.94	+19.94	+19.94	+59.82
Net Revenue Adjustment	+43.95	+36.69	+31.78	+112.42

Note 1. Figures may not sum due to rounding.

Table 4.1: MTR revenue claim.

- 4.6 This claim included a range of cost items covering the full six-year price control period. Power was the most significant element representing over 100% of the overall revenue claim, as a consequence of the other elements (positives and negatives) broadly balancing out.
- 4.7 NI Water has advised that it had to use its 'loan note' facility to cover £66m of extra operating costs in years 1 to 3, as DfI only provided budget cover for the cost increase rather than any additional 'cash' budget. The fact that the power cost increase in years 1 to 3 was in excess of the 'loan note' draw down indicates that considering power in isolation would represent a conservative approach to assessing the net negative revenue impact being experienced by NI Water. Based on the information submitted this also appears to be the case for the final three years of PC21.
- 4.8 As a result of this, and in line with the established principle that the Mid-Term Review should only re-open material issues and retain the integrity of the PC21 Final Determination as far as possible, the decision was taken that the Draft Determination assessment would only consider NI Water's power claim. As indicated above this simplified approach of considering power in isolation is neutral to NI Water for the period considered.

Note 2. Smoothed for year 4-6 adjustment.

Note 3. Six year figure smoothed for year 4-6 adjustment.

- 4.9 Whilst NI Water used its 'loan note' for meeting power costs in years 1 to 3, it has made the case that this is not sustainable moving forward. Its reasoning is that the additional borrowing has eroded any headroom remaining within the current 'loan note' facility and that it needs to repay this. It also highlighted the ongoing interest associated with the debt, the risk of the 'loan note' being breached before the end of PC21, if it is not replenished, and that tariffs had become 'unreflective' as they do not account for the impact of the additional power costs.
- 4.10 As set out in our MTR approach, noted again above, our intention was that the Mid-Term Review operating cost considerations should be forward looking rather than retrospective. For the Draft Determination we therefore only considered the impact of the increase in power costs for the final three years of PC21.
- 4.11 In its Draft Determination consultation response, NI Water asked us to reconsider our decision to exclude costs for the first three years of PC21. In doing so it restated its previous rationale.
- 4.12 We have considered NI Water's Draft Determination response but have decided to continue to exclude the company's claim for years 1-3 in our Final Determination. Our regulatory position remains that the Mid-Term Review operating cost considerations should be forward looking rather than retrospective. We also note that we have no regulatory remit on NI Water's approach to loans and borrowing, and consider this to be entirely a matter for NI Water and its shareholder, Dfl.
- 4.13 NI Water based its power costs for the final three years of PC21 on the following assumptions:
 - Volume of c293GW as per Budget 2023-24;
 - NI Water's new contracting arrangement from 1 October 2023 which moved to a SMP Day Ahead Electricity Product; and
 - Regulated Charges increasing by 6% in each of the years.
- 4.14 This resulted in cost projections of £54.4m, £50.9m, and £48.7m, for 2024-25, 2025-26, and 2026-27 respectively.
- 4.15 For our PC21 Mid-Term Review assessment, we firstly considered whether NI Water was taking reasonable steps to minimise cost increases, within the constraints of the local market and its governance/purchasing arrangements. Through information requests and engagement, we concluded that NI Water's electricity procurement processes were robust, that it had established contracts which were very keenly priced and that it was actively

- trying to reduce demand, all of which was helping to limit cost increases and expenditure.
- 4.16 Having established that NI Water was taking reasonable steps to minimise cost increases, we undertook an independent assessment of projected power costs. Our analysis used data from UR's Retail Market Monitoring function, alongside publicly available information on the historical prices in the SEM Day-Ahead Market (DAM) and formulae published by the SEM Committee, to develop an independent estimate of the expenditure the NI Water is likely to face in the final three years of PC21.
- 4.17 Our analysis resulted in forecast expenditure estimates which were £2.9m per annum (in 2018-19 prices) lower than the figures submitted by NI Water. The variance was primarily a result of downward movements in forward commodity prices, which would not have been visible to NI Water at the time of their submission.
- 4.18 We have therefore deducted this figure from NI Water's submitted power costs to establish revised revenue adjustment figures for our Mid-Term Review Draft Determination. Table 4.2 below shows the annual uplift that needs to be applied to the PC21 Final Determination allowances based on the outcome of our assessment.

Power (2018-19 £m)	2024-25	2025-26	2026-27	PC21
FD – Allowance	30.34	30.34	30.34	91.02
NI Water MTR submission	54.35	50.85	48.66	153.86
MTR – Assessment	51.45	47.95	45.76	145.17
MTR – Revenue Uplift from FD Allowance	+21.11	+17.61	+15.42	+54.15

Note 1. Figures may not sum due to rounding.

Table 4.2: Power variance uplift applied in Mid-Term Review.

- 4.19 NI Water also proposed implementing a true-up mechanism to account for any further Revenue changes in the second half of PC21. We did not include for this in the Mid-Term Review Draft Determination on the basis that we consider that introducing a new mechanism at this point of the PC21 process would not be proportionate, or appropriate.
- 4.20 In its response to our Draft Determination, NI Water restated its proposal for a true-up mechanism to be applied at the end of the Price Control due to the ongoing volatility in the energy market, as this would not only protect NI Water, but also ensure customers are not over-paying in the event of a significant decrease.
- 4.21 However, we still consider that introducing this new mechanism at this stage of PC21 would not be proportionate, or appropriate.

- 4.22 NI Water's Draft Determination responses in relation to the revenue claim for the first three years of the price control, and the true-up mechanism broadly reflect the positions the company had presented in its original submission and our engagement in advance of the Draft Determination. As a result, they had largely been considered previously and our associated conclusions, as presented in the Draft Determination, therefore remain the same.
- 4.23 Our Final Determination therefore continues to allow the £54.15m uplift for increased power costs across the last three years of PC21, as presented in Table 4.2 and does not allow for a true-up mechanism.
- 4.24 In its response to the Mid-Term Review Draft Determination, CCNI proposed that the revenue increase for power costs should be spread into the first year of the next price control to allow cost pressures to be distributed across tariffs over a three-year period instead of two. CCNI considered that this would reduce the immediate impact on consumers and help maintain tariff stability by lessening the potential need for future negative adjustments in K to compensate for non-delivery of investment or services.
- 4.25 Whilst the rationale for CCNI's proposal is noted and recognised, we have continued to apply the approach adopted in the Draft Determination for our Final Determination. This is because we do not have any certainty in relation to the amount of over/under recovery that will need to be accounted for at the end of PC21, and whether any significant negative adjustments to K will be required. We also consider that the WACI presented in Table 4.3 remains affordable, and so does not merit smoothing over a longer period due to the ongoing uncertainty that exists in relation to future outcomes, as noted above.

Tariff adjustment

- 4.26 The PC21 Mid-Term Review allowed for a review of tariffs if this was considered necessary. We have accepted NI Water's request to do so, due to the increase in power costs experienced by NI Water and have used the revised financial model submitted by NI Water to re-assess K-Factors.
- 4.27 Through this re-modelling, we have derived annual charge caps for each of the seven revenue groups as shown in Table 4.3 below. The price limits are shown in real terms (i.e. excluding inflation).
- 4.28 The overall revenue requirement has been allocated to revenue groups based on volumes of water consumed or sewage returned using the same assumption used in the PC21 Final Determination.

PC Stage	Revenue Group	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
	Domestic unmeasured water	-1.7%	1.0%	0.9%	0.9%	0.9%	0.9%
<u></u>	Domestic unmeasured sewerage	-1.7%	-0.4%	-0.4%	-0.4%	-0.4%	-0.4%
FD (Table 2.6)	Non-domestic measured water	-1.8%	-1.8%	-1.8%	-1.8%	-1.8%	-1.8%
Tabl	Non-domestic measured sewerage	-1.7%	-0.9%	-0.9%	-0.9%	-0.9%	-0.9%
FD (Non-domestic unmeasured water	-1.5%	0.2%	-0.3%	-0.2%	-0.1%	0.0%
PC21	Non-domestic unmeasured sewerage	-1.5%	0.2%	-0.3%	-0.2%	-0.1%	0.0%
	Trade effluent	-1.7%	1.5%	1.5%	1.5%	1.5%	1.5%
	Overall K factor (or WACI)	-1.7%	0.0%	0.0%	0.0%	0.0%	0.0%
	Domestic unmeasured water				5.4%	5.4%	5.4%
6.1	Domestic unmeasured sewerage				3.6%	3.6%	3.6%
MTR Submission (Table 6.14)	Non-domestic measured water	3.				3.0%	3.0%
	Non-domestic measured sewerage	As per annual tariffs			3.8%	3.8%	3.8%
nissic	Non-domestic unmeasured water	A2 h	ei aiiiuai t	aiiiis	4.6%	4.7%	4.8%
- Indus	Non-domestic unmeasured sewerage				5.2%	5.3%	5.4%
H	Trade effluent				6.1%	6.1%	6.1%
Σ	Overall K factor (or WACI)				4.3%	4.3%	4.3%
	Domestic unmeasured water					5.3%	5.3%
	Domestic unmeasured sewerage					4.2%	4.2%
	Non-domestic measured water					2.8%	2.8%
<u> </u>	Non-domestic measured sewerage	As per annual tariffs				3.8%	3.8%
MTR	Non-domestic unmeasured water		As per an	4.6%	4.7%		
	Non-domestic unmeasured sewerage				5.3%	5.3%	
	Trade effluent					6.0%	6.0%
	Overall K factor (or WACI)					4.5%	4.5%

Table 4.3: K factors by Revenue Group.

- 4.29 It can be seen that NI Water's Mid-Term Review submission had an overall annual Weighted Average Charge Increase (WACI) of 4.3% for each of the last three years of the price control. In the intervening period, the 2024-25 tariffs have been set using the PC21 Final Determination price limits and it was agreed that any adjustments from the Mid-Term Review determination would be applied to the final two years' tariffs.
- 4.30 In our PC21 MTR Final Determination we have adjusted NI Water's revenue claim to allow only power costs based on our forecast estimates for the final three years of the price control period. This has reduced the mid-term revenue uplift from £112m, as requested by NI Water, to £54m (in 2018-19 prices).

- 4.31 This £54m uplift and the Net Present Value has been applied to the final two years of the price control period in the model. In addition, we have adjusted the 2024-25 tariffs to actuals, and adjusted inflation to March 2024 OBR annual figures.
- 4.32 The outcome of these adjustments is an overall WACI of 4.5% in real terms which is to be applied in 2025-26 and 2026-27 as presented in Table 4.3 above.

5. Capital Investment

- 5.1 NI Water invests capital expenditure to maintain its existing assets, meet more demanding quality obligations, provide extra capacity for growth and improve the service that it currently provides to consumers.
- 5.2 Our PC21 Final Determination included allowances which we had assessed as being required to meet the established needs for the price control period, based on the information available at the time. This aligned with the aims and priorities set out in Dfl's S&EG, including the formulation of a deliverable and affordable plan.
- Our PC21 Final Determination however also included the provision for a PC21 Mid-Term Review, due to uncertainty over certain elements of the investment programme and set out our proposals for the review, including the extent and scope of the work that we anticipated undertaking.
- For capital expenditure we indicated that we were not minded to reopen our PC21 final assessment of capex cost efficiencies, or to undertake a wholesale review of the investment proposals. We have followed this principle when undertaking our Mid-Term Review and have limited our considerations to the areas detailed below.
- 5.5 For our PC21 Mid-Term Draft Determination, we applied November 2023 OBR inflation figures when undertaking our assessments, but noted that OBR had published a further RPI inflation dataset (i.e. March 2024) since our analysis had been completed, and that we planned to update our inflation assumptions for the MTR Final Determination, using this more recent data to ensure our final projections were as accurate as possible. We have followed this approach, and all the analysis presented below, including any data previously presented in the Draft Determination, is now based on March 2024 OBR data.

Scope Uncertainty in the capital programme

- In our PC21 Final Determination, we noted that the majority of the schemes in NI Water's wastewater treatment (SP16) and sewerage (SP12) sub-programmes were insufficiently developed from a scope/cost perspective to allow them to be determined at that time.
- 5.7 For the PC21 Final Determination, we therefore made provision for NI Water to undertake the work needed to establish an efficient scope and cost for these schemes, so that a determination could be undertaken as part of the Mid-Term Review. This included:

- NI Water's Drainage Area Plans and integrated environmental studies needed to identify solutions to major drainage issues; and,
- The future consents and catchment studies needed to identify appropriate solutions for wastewater treatment and sewerage system upgrades.
- 5.8 In the interim, our PC21 Final Determination included a 'holding' allowance for these schemes. This ensured that price limits and capital budgets made some provision for the necessary work while the efficient solutions were being developed.
- 5.9 At the time, NI Water provided a list of the wastewater treatment and sewerage projects where further development work was necessary to allow an efficient scope and cost to be established. It also submitted a programme which would allow the cost of these schemes to be determined at the PC21 Mid-Term Review.
- 5.10 The 'cost certain' information for these schemes was submitted by the company in four batches between September 2021 and March 2023. This is summarised in Table 5.1 below. This shows that the overall cost increased significantly compared to the estimate included in the PC21 Final Determination.

	No. SP12	No. SP16	Orig SP12 IPAC cost £m	Orig SP16 IPAC cost £m	Subm SP12 cost £m	Subm SP16 cost £m	Total cost change £m
Batch 1 submission total	9	0	16.177	0.000	17.926	0.000	1.749
Batch 2 submission total	14	8	19.150	46.035	44.827	68.916	48.558
Batch 3 submission total	25	4	39.386	18.560	52.153	30.299	24.506
Batch 4 NIAMP5 submission total	24	16	46.820	88.760	19.379	124.806	8.605
Batch 4 LWWP submission total ²	55	12	180.252	305.513	130.222	555.741	200.198
Batch 1-4 total ²	127	40	301.785	458.867	264.507	779.762	283.616
Total	16	5 ²	760	.652	1044	4.269	283.616

Note 1. Figures may not sum due to rounding. All costs are in 2018-19 prices (pre efficiency) unless stated otherwise.

Table 5.1: Scope certainty submissions Batch 1-4 summary.

As part of the Mid-Term Review process, the selection of projects and the associated costs were refined further by NI Water. This resulted in the company resubmitting a consolidated list containing updated cost data in Annex E of its Mid-Term Review submission.

Note 2. There are 2 projects allocated to both SP12 and SP16, costs have been split equally across both SP's.

- 5.12 During our assessment of NI Water's submissions, we found that NI Water had included 19 additional projects in both its scope certainty and Annex E submissions. These were not in its original list of scope uncertain schemes, and so we consider them to have been subject to determination as part of the original PC21 process. As a result, we have excluded them from our MidTerm Review assessment and intend to deal with any cost variances through the standard logging up/logging down process at the end of the PC21 period.
- 5.13 Table 5.2 shows the Annex E submission figures following our exclusion of the 19 projects and compares this to the original Annex E submission, the total collated cost of NI Water's scope certainty submissions and our original PC21 'holding' allowance.

	No. SP12	No. SP16	SP12 cost £m	SP16 cost £m	Total cost £m
FD – SC projects	123	23	275.1	370.2	645.4
Scope certainty submissions ²	127	40	264.5	779.8	1044.3
Annex E SC lines as submitted	125	40	330.8	660.2	991.0
Annex E SC lines excl 19 projects	123	23	319.4	514.6	833.9

Note 1. Figures may not sum due to rounding. All costs are in 2018-19 prices (pre efficiency) unless stated otherwise

Note 2. There are 2 projects allocated to both SP12 and SP16, costs have been split equally across both SP's.

Table 5.2: Scope certainty projects cost change by submission.

- 5.14 As part of our assessment process, we asked the Reporter to carry out an independent review of the proposed solutions and costs for a sample of NI Water's Annex E schemes.
- 5.15 The aim was to check if the solution chosen was reflective of need and represented the least cost option, whether value engineering had been undertaken to help minimise costs and if any scope risk applied was reflective of the improved confidence in the solutions.
- 5.16 A summary of the Reporter's audit and the resulting cost challenges, based on the original list of scope certainty projects, is shown in Table 5.3.

	LWWP	NIAMP5	ССР	Total
Number of sample projects	6	15	3	24
Sample projects cost	371.0	118.7	22.6	512.3
Challenge validity of specific cost lines	33.3	1.4	0.0	34. 7 (6.8%)
Challenge other miscellaneous costs	9.9	7.8	0.0	17.8 (3.5%)
Total Reporter cost challenge	43.2	9.3	0.0	52.4 (10.2%)

Note 1. All costs are in 2018-19 prices (pre efficiency) unless stated otherwise. Figures may not sum due to rounding.

Note 2. Living with Water Programme (LWWP); NI Water Asset Management Plan 5 (NIAMP5); Change Control Protocol (CCP).

Table 5.3: Reporter's scope certainty cost challenge.

- 5.17 It can be seen that the Reporter's overall cost challenge was c£52m (10.2%) for 24 sample projects which had a total PC21 value of c£512m. This comprised of c£35m (6.8%) for cost lines/curves not supported by sufficient evidence, and c£18m (3.5%) for other miscellaneous challenges, including those associated with the scope risk which NI Water had applied to individual projects.
- 5.18 The Reporter's findings were shared with NI Water in advance of our Draft Determination, and it accepted that c£6m (1.2%) of the miscellaneous cost challenge was justified. NI Water however indicated that it believed it could provide additional information to justify the inclusion of the majority of the remaining costs, including all of those associated with the cost lines/curves.
- In advance of our Draft Determination, the Reporter had advised that he was not necessarily disputing the need for the activities associated with the c£35m cost lines/curves challenge, it was just that NI Water had not provided information to justify the submitted cost. As NI Water was confident it could do so, and on the assumption that this would be the case, we excluded this amount from our Mid-Term Review scope certainty adjustment in the Draft Determination. We therefore only applied a reduction of 3.5% to the scope certainty projects. This was equivalent to the miscellaneous cost challenge identified through the Reporter's sample audit.
- We believed that this represented a reasonable and balanced approach for the Draft Determination, pending NI Water's provision of further justification in advance of the MTR Final Determination. This was because it took account of NI Water's belief it could provide justification for c£12m of the c£18m 'miscellaneous' cost challenge, and that any success in doing so had the potential to balance any of the c£35m 'cost line/curve' deduction that NI Water was not able to fully justify.
- 5.21 The Draft Determination however noted that we would reinstate any Reporter cost challenges in the MTR Final Determination if NI Water was unable to

provide sufficient evidence to refute them. On this basis, we advised that the MTR Final Determination scope certainty challenge could lie anywhere in the range between 1.2% (based on the challenge accepted by NI Water at that time) and 10.2% (based on the full Reporter challenge if NI Water could not provide justification for the costs).

- 5.22 NI Water submitted further information to justify these costs in its response to the Draft Determination and also revised its assessment of the amount of scope certainty adjustment that was justified from c£6m (i.e. 1.2%) to c£8m, or 1.25%. This revision reduced the variance between the figure used for the Draft Determination and NI Water's position to c£10m.
- 5.23 Following the receipt of this information we engaged with the Reporter to determine the extent of work that would be required to consider and conclude on the validity of the additional evidence submitted by NI Water. This established that the input would be material, both in terms of time and cost.
- Through our engagement with the wider stakeholder group, we are also aware that Dfl had asked NI Water to align its investment plan with anticipated public expenditure funding for the remainder of PC21, which is expected to be materially lower than would be required to deliver the outputs included in both our PC21 Final Determination and our PC21 MTR.
- 5.25 This work is being undertaken through a separate exercise which UR is not involved in as we are of the view that it would compromise our statutory position. This is because our determination sets a revenue allowance which we believe is necessary for NI Water to carry on its business in line with statutory obligations. Our position is therefore that NI Water should be fully funded and that any divergence from this risks compromising the company's ability to deliver on the applicable statutory requirements.
- 5.26 However, in practical terms, we recognise that the application of significant public expenditure constraints outside our determination process may have a material impact on the outputs that NI Water is able to deliver during the price control. If this occurs, and the usual prioritisation principles are applied, then it is anticipated that the company's ability to deliver the planned wastewater and sewerage enhancement programmes would be significantly impacted. This is because expenditure on the maintenance of existing services to existing customers and on clean water enhancement projects due to the latter's link to public health are likely to take precedent.
- 5.27 In these circumstances the scale of any proposed scope certainty adjustment could become immaterial, as the percentage reduction is only applied to wastewater and sewerage enhancement investment. As a result,

- we do not believe that the completion of this additional work would represent value for money for consumers until such time as it is confirmed that the necessary funding to allow this investment to proceed is available.
- 5.28 In the meantime, for the purposes of our MTR Final Determination, we have decided to continue to apply our Draft Determination adjustment of 3.5%. Considering where this lies within the range of potential outcomes, we believe that it still provides a reasonable interim approximation of the required allowance, whilst avoiding any unnecessary additional cost and delay in the short term.
- 5.29 However, should the necessary investment subsequently be provided during PC21, we will ensure that the Reporter completes the assessment of the additional information submitted by NI Water so that we can come to a firmer conclusion on the scope certainty adjustment at a point of time when it is more meaningful and has real consequence.

Capital Cost Pressures above Inflation (Real Price Effects)

- 5.30 In its Mid-Term Review submission, NI Water advised it had experienced significant construction cost pressures above inflation because of unprecedented economic instability since the PC21 Final Determination. It indicated that this had been driven by external factors such as Brexit, Covid19 and energy/resource inflation. It requested that these real price effects (RPEs) be allowed as part of the Mid-Term Review.
- 5.31 NI Water's submission included a waterfall diagram which can be seen in Figure 5.1. This separated out the various components of the company's capital funding request, which totalled £2,749m in nominal terms. It can be seen that NI Water's additional inflation request for RPEs was £379m above RPI, based on March 2023 Office of Budget Responsibility (OBR) RPI forecasts.

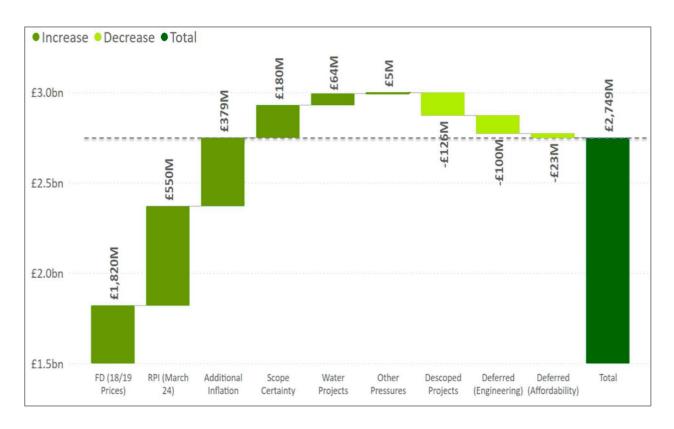


Figure 5.1: NIW Mid-Term Review submission waterfall diagram.

- 5.32 NI Water had estimated this Real Price Effect using a new detailed 'bottom up' approach, which was materially different to that used by us and NI Water in the PC21 determination process.
- 5.33 This new NI Water analysis resulted in estimates of inflation of 13.0% and 23.4% for 2021-22 and 2022-23, which were around 7% and 11% higher than RPI respectively. For the remaining years of the PC21 period, NI Water assumed inflation levels would revert to the forward projection of RPI based on March 2023 OBR data.
- 5.34 The effect of this analysis and the extent to which NI Water's assessed figures exceed the RPI and CPI(H) figures published by OBR and ONS (based on March 2024 OBR and June 2024 ONS data) can be seen in Figure 5.2 below.
- 5.35 Based on an approximation, we estimate that OBR's CPI(H) figures would need to be increased by c25% to match NI Water's. This conclusion is surprising, because the published inflation figures (including the construction PAFI indices that NI Water materially adjusted in its assessment) are intended to capture and allow for inflationary impacts.

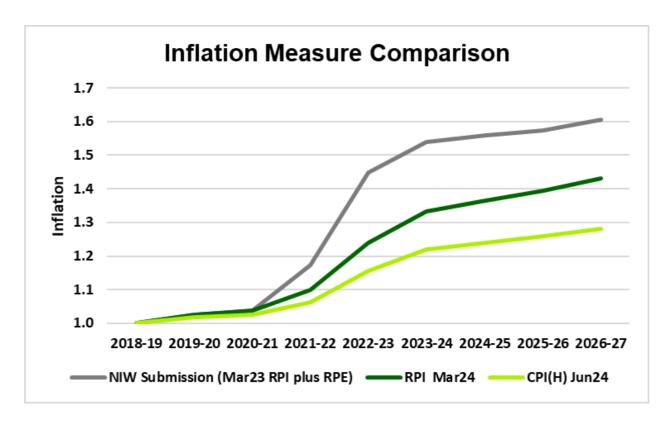


Figure 5.2: Comparison of NIW measured inflation to RPI and CPI(H).

- 5.36 NI Water provided the analysis used to determine its inflation figures as part of its Mid-Term Review submission. Our initial observations were that the adopted approach was complex, involved extensive data manipulation, and adjustment of published inflation data, had the potential to be selective and was based on a small number of projects. This raised concerns in relation to the confidence that could be placed on the conclusions and the extrapolation of the findings to the entire investment programme.
- 5.37 As a result, for our Draft Determination, we decided to consider NI Water's request from a range of different perspectives as described below⁸.
- 5.38 We 'refreshed' the original PC21 RPE calculations using updated inflation figures and input price indices and tested various combinations. These included:
 - Repeating the PC21 UR approach for frontier shift.
 - Repeating the PC21 NIW approach for frontier shift.
- 5.39 These analyses estimated RPEs which were below RPI.

⁸ Note that for the purposes of the Final Determination the figures presented have been updated using more recent (i.e. March 2024 OBR data) inflation data to ensure the comparisons are as accurate as possible. This does not alter any conclusions which remain consistent with the draft determination.

5.40 We sense checked NI Water's figures against the CPI(H) adjustments allowed in our GD23 Final Determination⁹. We did so by approximating the effect on the June 2024 ONS CPI(H) trend line. This can be seen in Figure 5.3 below.

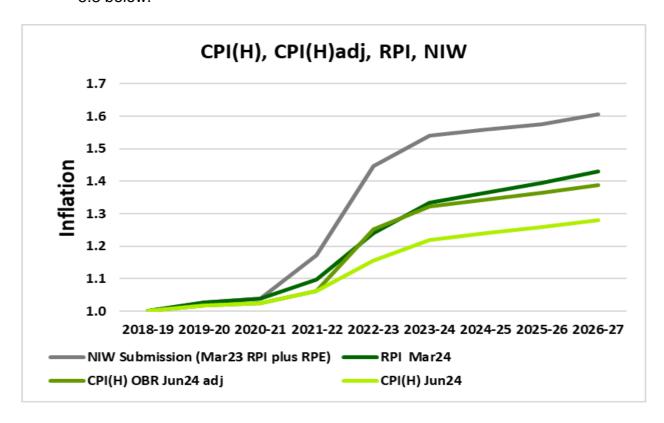
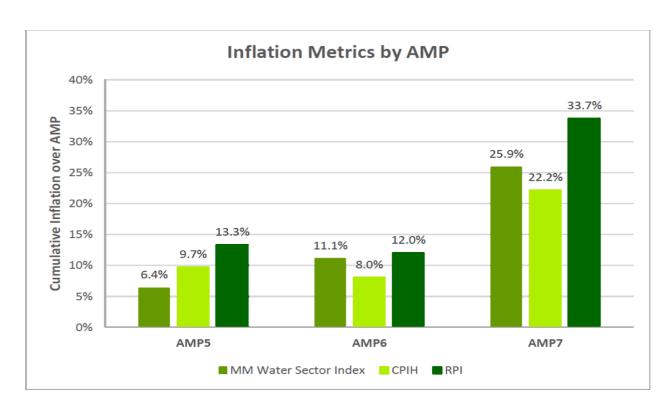


Figure 5.3: Comparison of water sector inflation to adjusted CPI(H).

- 5.41 This analysis only resulted in the adjusted CPI(H) figures marginally exceeding RPI in one year rather than exceeding it materially on a consistent basis.
- We commissioned an independent review by the Reporter which provided access to cost estimation expertise, direct knowledge of company requests being made as part of the Ofwat PR24 process and an extensive database (c£800m) of water sector specific cost data from England and Wales (E&W).
- 5.43 The Reporter provided an analysis of inflation in the water sector in E&W over the long term for the Asset Management Periods AMP4-AMP7 covering the years 2005-25, as shown in Figure 5.4. This illustrates that RPI has consistently exceeded cost increases in the E&W water sector.

⁹ GD23 Final Determination



Note 1. AMP5 (2010-2015), AMP6 (2015-2020), AMP 7 (2020-2025).

Figure 5.4: Long term water sector inflation - Reporter (Mott McDonald).

5.44 The Reporter also provided a shorter-term analysis which can be seen in Figure 5.5 below. This indicates that the E&W water sector cost data did not materially exceed RPI at any point within the period and that it is not reflective of NI Water's inflation data.

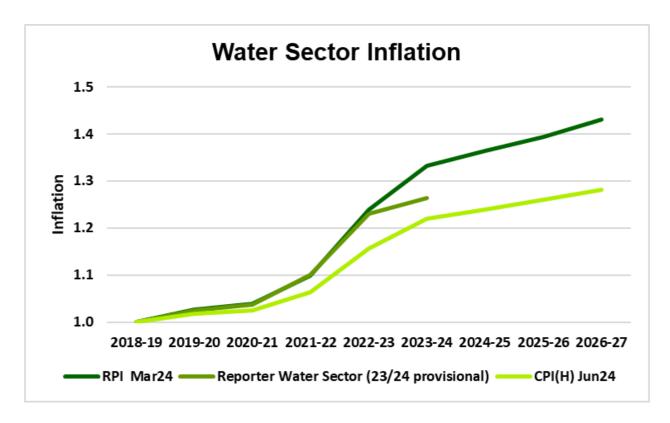


Figure 5.5: Comparison of water sector inflation to RPI and CPI(H).

- 5.45 While the Reporter data included in the figures above applies to E&W, we have consistently found in our price control determinations that construction costs in Northern Ireland are lower than the overall United Kingdom average.
- 5.46 NI Water suggested this might have changed due to the localised impact of Brexit. We therefore undertook a regional construction price sense check, by considering more recent data sourced from two public websites¹⁰. These quoted figures of 75% and 82% for Northern Ireland, which compares to the PC21 Final Determination range of 87%-94%. This exercise therefore did not support any change to our previous conclusions.
- 5.47 We also sense checked the scale of increase proposed by NI Water against the uplift that would be provided by RPI. We found that March 2024 OBR RPI figures would already allow a £613m (34%) increase against the PC21 Final Determination real price figure of £1.82bn and that NI Water's figures would equate to a c50% increase.
- 5.48 NI Water's request suggests that the extra £613m that the March 2024 OBR RPI figures already allow, would need to be uplifted by a further 52% to

https://costmodelling.com/regional-variations https://constructioncosts.eu/cost-index/united-kingdom/

- match NI Water's figures. We are not aware of any other independent sources of information which would support this assertion.
- 5.49 For the Final Determination we undertook a further piece of analysis to supplement the checks and comparisons completed for our Draft Determination. This assessment repeated the sense check of NI Water's figures against CPI(H) that had been carried out for our MTR Draft Determination using GD23 information (as presented in Figure 5.3 above), but this time used Northern Ireland Electricity Networks' (NIEN) methodology from our RP7 price control¹¹. The outcome of this analysis in presented in Figure 5.6 below.

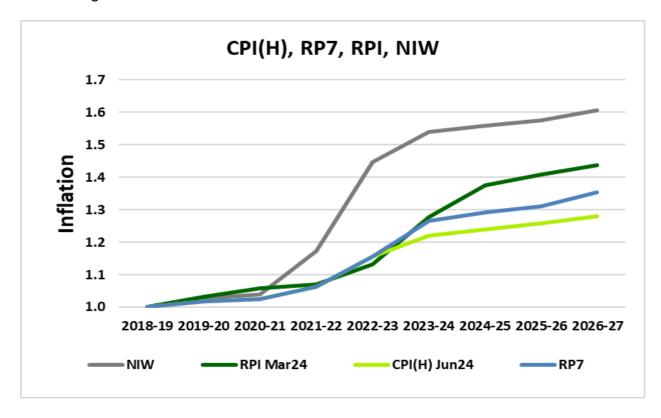


Figure 5.6: Comparison of water sector inflation to RP7.

- 5.50 This resulted in a similar outcome to the equivalent GD23 assessment, with the CPI(H) figures only marginally exceeding RPI in one year, rather than exceeding it materially on a consistent basis.
- 5.51 It is acknowledged that the analysis across our different price controls (as presented in Figure 5.3 and Figure 5.6) does not provide a direct comparison, due to the forecasts for general inflation moving as time progresses and the use of calendar years as opposed to financial years for 'Gas Distribution' price controls. However, despite these qualifications, it is considered that these approximations are sufficiently robust to demonstrate

¹¹ RP7 Draft Determination

- that the position presented by NI Water regarding RPEs remains an outlier amongst the other companies that we regulate.
- 5.52 Based on the outcome of the above tests/checks, our conclusion on RPEs remains the same as in the Draft Determination. That is that there is no evidence of RPEs (by definition) in excess of RPI. We have therefore continued to exclude NI Water's Real Price Effect claim (equating to £316m based on March 2024 OBR data) on the basis that we have not found any independent sources of information which support it.
- 5.53 In response to our MTR Draft Determination conclusions, NI Water had submitted a significant amount of further data and analysis aimed at demonstrating that it had experienced significant cost increases in the early years of PC21. This was largely based on quotations and tender costs related to the period of higher than usual inflation. Outturn cost information did not form part of the case being made by NI Water, and the amount of cost data for materials that was based on actual invoices was limited.
- 5.54 On first inspection the information submitted would suggest that actual material and tender costs are higher than would be predicted by NI Water's original cost estimates adjusted for RPI.
- 5.55 Whilst we remain clear that this is not a result of RPEs for the reasons outlined above, it may reflect reality regarding the costs being submitted to NI Water.
- 5.56 There are a number of reasons why this might be the case, and some examples are provided below.
 - NI Water used a bottom up approach to estimate the cost of its PC21 projects. In doing so it used individual cost curves to predict costs for individual elements of a particular scheme before adding these together to generate an overall 'base cost'. Clearly the accuracy of the individual cost curves used within this process is integral to the accurate prediction of the tender costs it might subsequently receive. For example, if the original cost curves were on average too low for any reason, then actual tender costs might be higher than the original estimates and price control will have allowed for.

- As indicated previously, the information submitted by NI Water was from a period of extraordinary inflation when supplier and subcontractor prices were changing on monthly, weekly or even daily basis. In these circumstances, it is not inconceivable that tenderers might become extremely risk averse. and seek to build cost escalation into their tenders 'up front' as a means of protection and risk mitigation. This rise in tender cost however, does not necessarily mean that the outturn costs of a scheme, and therefore the allowances required by NI Water, would be proportionally higher. This is because some of the 'normal' cost escalation that our price control allows for may already have been accounted for if the actual cost pressures experienced by the contractors are not as significant as they priced for in their tenders. If this was the case, then basing any additional cost uplift on tendered prices could result in an allowance which is in excess of requirements, unless the tender to outturn ratio that is applied within the process is checked, and if necessary, adjusted accordingly.
- NI Water has a responsibility to make sure that any cost increases or escalation sought by a supplier or contractor is justified and to mitigate against these as far as possible, on behalf of its consumers. The effectiveness and robustness of its procurement and governance processes are key to ensuring that this occurs. This includes making sure that any 'easements' related to the slowing down of the rate of cost increase, or as a result of cost reversal, are captured and realised for the benefit of the consumer, as it delivers its investment programme.
- 5.57 The reason for any cost escalation is key to establishing where the 'responsibility' for meeting the increase lies. We therefore recognise that there is a need to determine why NI Water's costs appear to be higher than anticipated. This will be important for informing the delivery of outputs during the remainder of PC21, the allocation of 'responsibility' within our PC21 Outturn Report and the robustness of any cost estimates used within the business planning process for the next price control period.
- 5.58 This is a complex issue which will take time to investigate, as it may not be attributable to one reason in isolation. Taking this into account, we have concluded that undertaking this work within the mid-term review process would cause undue delay to its completion.
- 5.59 We will therefore complete it outside the mid-term review, and conclude and report on it separately early in 2025.

- In its Draft Determination response NI Water also noted that its submission included for an element of economic deferral based on the assumption that its RPE request would be fully allowed. In its response, NI Water asked for this deferral adjustment be removed, and all projects to be determined on the full business case value of the PC21 investment, if the RPE request was disallowed.
- This appears contradictory on the basis that NI Water is on one hand adamant that its cost increases are real and justified by evidence. Yet on the other hand appearing to implicitly accept that if we decide anything else this would provide additional headroom for project delivery within a 'ceiling' cost. We are not clear how NI Water can maintain both these positions.
- Irrespective of this, the headroom that NI Water might have available to deliver additional projects will not be known until the additional work to establish the reasons for NI Water's apparent cost increases above RPI is understood. It is therefore not possible to quantify, and conclude on this issue, at this stage.

Base maintenance investment

- 5.63 A major component of NI Water's capital programme is the investment needed to maintain its existing assets and the service they deliver. This equates to approximately 40% of NI Water's total capital budget and is referred to as base maintenance.
- 5.64 In line with consumer expectations and the requirements of the S&EG, the established policy is that base maintenance allowances should be maintained as a priority when faced with any budgetary pressures.
- This principle is intended to ensure that there is no overall deterioration in the asset base and the associated level of service provided to existing consumers. We have continued to apply this principle in the Mid-Term Review.
- 5.66 In its Mid-Term Review submission and consultation response, NI Water has made the case that its base maintenance costs have increased in PC21 due to the impact of RPE cost pressures above inflation. However, as indicated above, our draft and Final Determination conclusion is that we have not found evidence of any material level of RPEs above the general measure of inflation (i.e. RPI). We therefore do not believe that any adjustment to base maintenance is required to account for RPEs within the Mid-Term Review.
- 5.67 We have however noted that further work is required to try to establish why the information submitted by NI Water appears to indicate that actual

material and tender costs are higher than would be predicted by NI Water's original cost estimates adjusted for RPI. Once this work has been completed and the reason, and hence the 'responsibility', for this cost divergence has been established, we will be able to better assess whether NI Water needs to increase the level of base maintenance expenditure. We will take account of the outcome of this work in our next water price control. Any decisions in this regard will need to take account of the overall scale of the investment programme, and the consequential base allocation that is already included in the PC21 allowance.

Our Draft Determination conclusion that the PC21 Regulatory Depreciation allowance should be used for its original purpose therefore remains in place until such times as the extent to which it is needed to meet any other base maintenance cost pressures is proven.

Enhancement investment

- The remainder of the capital budget is allocated for enhancing NI Water's assets to deliver improvements for consumers. This includes meeting enhanced quality obligations, providing extra capacity to accommodate growth/development and improving the service provided to consumers (for example by reducing incidents of low pressure or flooding).
- 5.70 The established principle of prioritising base maintenance expenditure means that any budgetary pressures primarily impact the enhancement element of the budget and the associated improvements that this was intended to deliver for consumers. Furthermore, in line with the established principles of prioritising drinking water investment within the enhancement budget, any impacts would be expected to mainly affect wastewater investment and more specifically the Unsatisfactory Intermittent Discharge (UID) programme.
- 5.71 In the Mid-Term Review we have evaluated various aspects of the enhancement programme. Our conclusions are summarised in Table 5.4 below and these have been considered in coming to our final assessment for the Mid-Term Review.

Enhancement programme investment aspect	Conclusion on potential impact
The work undertaken to review and revise the prioritised list of wastewater outputs because of the scope certainty submissions	We have accepted NI Water's prioritised list as the best available. We recognise that NI Water continues to work with NIEA to confirm the list.
Any change controls that have been submitted/approved	The Reporter assessed the solution and associated costs included in CCP1-3 and we have updated the enhancement element of the costs as part of the MidTerm Review.
The impact of cost pressures above inflation	Our assessment concludes that Real Price Effects (RPEs) are not present when measured against general inflation (RPI). ¹²
Additional outputs that can be delivered as a consequence of any cost challenges applied	We have updated the list of outputs as a result of the scope certainty submissions
The outcome of our assessment of the business cases submitted by NI Water for expenditure areas where approval for continued investment for the remainder of period is dependent on proof of benefit	NI Water have successfully demonstrated the need for continued investment in the remainder of the price control.

Table 5.4: Enhancement programme investment aspect consideration.

Change control projects

- 5.72 It is recognised that there can be a need to make changes to the planned delivery programme during a price control, for example because of changing regulatory standards or quality regulator enforcement.
- 5.73 Our established regulatory processes already include a formal Change Control Protocol which allows these changes to be accommodated and managed. This sets out the procedures and steps that key stakeholders must follow to control changes to outputs. It provides a structured framework for managing changes, and ensuring they have been agreed by stakeholders.
- 5.74 NI Water submitted three change controls in the first half of PC21. These were accepted by all key stakeholders (subject to UR's cost assessment) on the basis that they were needed to meet either key water quality or supply resilience drivers.
- 5.75 The additional enhancement budget allowances requested for these change controls in the mid-term submission are detailed in Table 5.5 below. The table also includes some 'balancing' budget reductions, which result from some of the PC21 Final Determination allocations having been replaced by the change control proposal, or no longer being required due to project delays. The figures included in the table only relate to the enhancement element of the budget because the base maintenance allocation for all

¹² Further investigations are however planned to establish why the information submitted by NI Water appears to indicate that actual material and tender costs are higher than would be predicted by the company's original cost estimates adjusted for RPI.

capital investment is set as a single allowance for the price control and is therefore already covered. As a consequence, we only need to adjust the enhancement budget in the Mid-Term Review.

Enhancement costs variance for change control projects	Project ref	PC21 enhan £m	Mid-Term Review enhan £m	Variance £m
CCP001 Derg				
Derg Treatability Improvements	1927, JN562	2.8	7.2	4.5
Derg WTW MCPA PEO Undertakings	JN538	4. 9	3.7	-1.2
CCP002 Ballinrees				
Ballinrees WTW, MCPA treatment investigations	JL795, JA341	4.3	14.7	10.4
Pilot Plant Studies 2022/23	JI280		0.8	0.8
CCP003 Beltoy - Unagh				
Beltoy / Unagh WPS	JI212		1.6	1.6
Caugh Hill, Carmoney to Strabane Strategic Link Watermain	JL715	17.8	12.2	-5.6
CCP001, CCP002 and CCP003				
Total		29.7	40.1	10.4

Note 1. All costs are in 2018-19 prices unless stated otherwise. Figures may not sum due to rounding.

Table 5.5: Change control protocol projects.

- 5.76 The Reporter reviewed the business cases for these change control projects as part of his wider Mid-Term Review audit and has confirmed that NI Water's proposed solutions are appropriate. We have therefore included the enhancement element of the costs in our Mid-Term Review capex allowance, and deducted any balancing budgets linked to the original PC21 investment proposals accordingly.
- 5.77 The outcome is a net increase of £10.4m in the required capex allowance when expressed in 2018-19 prices.

Substitution projects

- 5.78 In its PC21 MTR submission, NI Water removed a number of the original scope certainty projects from its investment programme because of the materiality of the cost increases. In doing so, it proposed some new projects as replacements. In our Draft Determination we included these schemes as outputs, but did not account for their costs in our Capex assessment. NI Water advised us of this anomaly in its response to the Draft Determination.
- 5.79 Whilst the PC21 Outturn Report provides a mechanism by which this issue could be resolved in the future, this would result in a misalignment between

- outputs, and costs in the short term. We have therefore decided to correct this within the PC21 Mid-Term Review Final Determination, as this is the approach we would have adopted in the Draft Determination if we had noticed the issue at the time.
- 5.80 The additional costs for the completion of water treatment works pilot plant studies instead of treatability studies have also been included as this reflects the remit of the outputs now being delivered, is strongly supported by DWI and will benefit consumers by helping avoid nugatory expenditure through the optimisation of solutions.
- 5.81 Table 5.6 below lists the substitution projects and the enhancement element of their costs. In line with the approach adopted for the Change Control Projects, we have only adjusted the enhancement budget in the Mid-Term Review because the base maintenance allocation for all capital investment is set as a single allowance for the programme as a whole and already covered. It can be seen that including the enhancement expenditure for these schemes results in a net increase of £16.1m in the required capex allowance, when expressed in 2018-19 prices.

Enhancement costs increase for substitution projects	Project ref	Mid-Term Review enhan £m
Pilot Plant Studies (excluding JI280 CCP002)	JA338, JA342, JA346, JG095, JI220, JI265, JI321, JL824, JP708	7.6
Aghacommon - Holding Line (Solution Development)	TBC	1.9
LWWP Greenisland Catchment CSOs	KR761	1.7
Templepatrick 2 WwPS - Holding Line (Solution Development)	TBC	1.3
Umry Lodge CSO - Holding Line (Solution Development)	TBC	1.3
LWWP Seahill Catchment CSOs	KR763	1.2
Lower Woodburn WwPS	KR747	1.2
Total		16.1

Note 1. All costs are in 2018-19 prices unless stated otherwise. Figures may not sum due to rounding.

Table 5.6: Substitution projects enhancement costs.

Mid-Term Review Capex conclusion

5.82 Our reassessment of the overall PC21 Capex requirement for the PC21 period is £1.77bn in 2018-19 prices. This accounts for the removal of the RPE claim, the deduction of 3.5%¹³ from the scope certain scheme costs, the inclusion of the change controls driven by in-period quality and resilience requirements, and the inclusion of the 'substitution' project costs. This 'real

¹³ Holding position until such times as the required wastewater and sewerage enhancement budget is provided.

- price' requirement is £50m less than the PC21 Final Determination figure of £1.820bn.
- 5.83 This reduction is primarily a result of the removal of projects that are no longer required, are undeliverable, or have been deferred due to delivery costs being prohibitive.
- The most significant impact in relation to funding requirements results from RPI being much higher than anticipated at the time of the PC21 Final Determination. This has increased the nominal budget requirement from the PC21 Final Determination estimate of £2.086bn (based on March 2021 OBR forecast) to an estimated £2.367bn (based on March 2024 OBR figures/forecast). This represents an increase of £281m (c13%), compared to the PC21 Final Determination nominal budget estimate, but represents a c14% reduction when compared to the figure of £2.749bn submitted by NI Water.
- 5.85 Table 5.7 below summarises the outcome of our financial assessment in real and nominal terms and includes the PC21 Final Determination figures for comparison.

	Rea	Real 2018/19 price			Nominal			
	Base	Enhan	Total	Base	Enhan Total		Inflation source	
FD – Gross capex	715.040	1104.558	1819.598	816.238	1270.120	2086.358	Mar 21	
Scope certainty projects	715.040	1028.474	1743.513	949.840	1382.834	2332.674	Mar 24	
CCP1-3 adjustment	0.000	10.391	10.391	0.000	12.780	12.780	Mar 24	
Substitution projects	0.000	16.118	16.118	0.000	21.602	21.602	Mar 24	
MTR – Gross capex	715.040	1054.845	1769.885	949.84	1417.216	2367.056	Mar 24	
Variance from PC21 FD			-49.713			280.698		

Note 1. Figures may not sum due to rounding.

Table 5.7: Mid-Term Review gross capex requirement.

- 5.86 However, as indicated previously, further work is being undertaken outside the MTR process to establish why information submitted by NI Water appear to indicate that actual material, and tender costs are higher than would be predicted by NI Water's original cost estimates, adjusted for RPI.
- 5.87 Our capital investment conclusions therefore do not account for any costs which might subsequently be considered 'allowable' because of the completion of this work. Until this work concludes, the figures quoted in this PC21 MTR Final Determination should therefore be viewed as being at the lower end of the range, in terms of the expenditure required to deliver the associated outputs.

5.88 To avoid any potential misunderstanding in the interim, any reference to the capital investment figures by stakeholders should clearly acknowledge this, and the potential for the expenditure required to deliver the Mid-Term Review outputs to be higher.

6. Implications for Public Expenditure

- This section sets out how our allowances translate into the mechanisms which Government use for allocating public expenditure (PE).
- 6.2 NI Water does not charge domestic customers directly for the services they receive. The domestic consumer charge and the domestic allowance for commercial consumers is therefore met by Government subsidy through PE mechanisms. This subsidy is provided annually in nominal, or cash, terms and represents about 80% of the funding that the company receives.
- 6.3 NI Water is classified as a Non-Department Public Body (NDPB) because of receiving this level of subsidy and is required to operate within PE limits as a result. PE limits, also known as Departmental Expenditure Limits (DEL), are subdivided into operating costs (Resource DEL) and capital costs (Capital DEL).
- 6.4 Inflation has an impact on the money that NI Water needs to spend in nominal, or cash, terms in each year to operate its business and deliver its planned investment. As future levels of inflation are not known at the time of our price control determinations, we use costs expressed in the price base for a particular year to ensure all our financial assessments are undertaken on a consistent, like for like, basis. For our PC21 determination we used a price base of 2018-19.
- 6.5 We then use the most recent published inflation projections to estimate what this might represent in annual nominal budgets for the price control as a whole. The nominal budget requirements stated in our determinations can therefore only be considered as indicative until actual annual levels of inflation are known. This is why we allow our annual revenue allowances to be uplifted by the latest RPI figures annually through the scheme of charges process.
- 6.6 In simple terms, if inflation has been higher than assumed in the PC21 Final Determination, NI Water will require more money in each year than originally estimated to deliver the same level of service and the same number of outputs.
- 6.7 This is of particular importance to DfI, as the impact of inflationary movements not only has implications for non-domestic charges, but also the public expenditure budget that DfI provides on an annual basis in lieu of domestic charges.
- 6.8 Our PC21 determination used the latest Retail Price Index inflation forecasts, published by the Office of Budget Responsibility (OBR), available at that time

- (i.e. March 2021). For our Mid-Term Review Draft Determination assessment, we used the latest RPI forecast figures that were available when we were undertaking our analysis (i.e. November 2023). For the Final Determination we have updated our analysis using more recent RPI forecast figures (i.e. March 2024). This has allowed us to provide a more up to date assessment of the ongoing nominal budget requirements.
- The following sections explore the implications of our Mid-Term Review assessment in terms of Resource DEL and Capital DEL budgetary requirements (i.e. the elements subsidised by Dfl).

Resource DEL

6.10 The Resource DEL nominal budget estimates included in the PC21 Final Determination were based on March 2021 OBR inflation projections. The Resource DEL total was c£732m as shown in Table 6.1 below.

PE Resource DEL	2021-	2022-	2023-	2024-	2025-	2026-	PC21
	22	23	24	25	26	27	Total
FD – Nominal OBR Mar21	122.0	120.8	119.7	119.9	122.9	126.8	732.1

Note 1. Figures may not sum due to rounding.

Table 6.1: PC21 Final Determination Resource DEL.

- 6.11 These PC21 Final Determination figures form the basis of our MTR Resource DEL estimates. Additional revenue has been added to the final three years of PC21 to account for the £54m power costs uplift (2018-19 prices) and the additional non-domestic income arising from the MTR tariff uplift.
- 6.12 When we account for the impact of inflation (based on March 2024 OBR inflation projections) and our Mid-Term Review revenue assessment, we estimate that the public expenditure Resource DEL provision for the final three years of PC21 would need to be c£492m, as shown in Table 6.2 below. This is c£122m higher than would have been expected, based on PC21 Final Determination estimates.

PE Resource DEL	2021- 22	2022- 23	2023- 24	2024- 25	2025- 26	2026- 27	PC21 yrs4-6 Total
FD – Nominal OBR Mar21	-	-	-	119.9	122.9	126.8	369.6
FD – Received nominal	148.6	171.6	171.9	-	-	-	-
MTR – Nominal OBR Mar24 ²	-	-	-	170.5	162.9	158.5	491.9
Variation from FD (OBR Mar21) to MTR (OBR Mar24)	-	-	-	50.6	40.0	31.7	122.3

Note 1. Figures may not sum due to rounding.

Note 2. The RPI inflation indices used to calculate these figures are based on November actuals as published by the ONS and RPI Q4 inflation forecasts based on Mar24 OBR.

Table 6.2: MTR Public Expenditure Resource DEL Requirements.

Capital DEL

6.13 The Capital DEL nominal budget estimates included in the PC21 Final Determination were based on March 2021 OBR inflation projections. The Capital DEL total was c£2,050m as shown in Table 6.1 below.

PE Capital DEL	2021-	2022-	2023-	2024-	2025-	2026-	PC21
	22	23	24	25	26	27	Total
FD – Nominal OBR Mar21	178.6	251.2	327.3	438.2	449.4	405.7	2050.5

Note 1. Figures may not sum due to rounding.

Table 6.3: PC21 Final Determination Capital DEL.

- 6.14 For the purposes of the MTR Capital DEL budget requirement calculation, we have assumed that capital grants and contributions, residual interest and alpha PPP maintenance all remain unchanged from the PC21 Final Determination in real terms.
- 6.15 In addition, we have used actual figures for the first three years of PC21 to calculate the balance required for the final three years of the price control period.
- 6.16 When we account for the impact of inflation (based on March 2024 OBR inflation projections), our Mid-Term Review assessment and the budget received to date, we estimate that the public expenditure Capital DEL provision for the final three years of PC21 would need to be c£1,465m to deliver the planned investment and MTR outputs. As can be seen in Table 6.4 below, this is c£171m higher than would have been expected, based on PC21 Final Determination estimates.

PE Capital DEL	2021- 22	2022- 23	2023- 24	2024- 25	2025- 26	2026- 27	PC21 yrs4-6 Total
FD – Nominal OBR Mar21	-	-	-	438.2	449.4	405.7	1293.3
FD – Received nominal	222.1	290.1	337.3	-	-	-	-
MTR – Nominal OBR Mar24	-	-	-	479.6	537.6	447.5	1464.7
Variation from FD (OBR Mar21) to MTR (OBR Mar24)	-	-	-	41.4	88.2	41.8	171.4

Note 1. Figures may not sum due to rounding.

Table 6.4: MTR Public Expenditure Capital DEL Requirements.

- 6.17 As indicated previously, we plan to undertake further work outside the midterm review process to establish why NI Water's actual material and tender costs appear to be higher than would be predicted by the company's original cost estimates adjusted for RPI, despite the lack of Real Price Effects.
- There is the potential that this might identify that NI Water would be unable to deliver the outputs in the MTR for the Government expenditure figures quoted. So, until this work concludes, the capital investment figures quoted in Table 6.4 should be viewed as being at the lower end of the range, in terms of the expenditure required to deliver the associated outputs, based on our inflation assumptions.
- 6.19 To avoid any potential misunderstanding in the interim, any reference to these figures by stakeholders should clearly acknowledge this and the potential for the expenditure required to deliver the outputs to be higher.

7. Next Steps

Monitoring and Reporting on Delivery

- 7.1 Our PC21 MTR Final Determination presents our current assessment of what represents an affordable, deliverable plan, that meets the established needs for the PC21 price control period. The revenue allowance and outputs presented in this Final Determination are reflective of this.
- 7.2 We will monitor delivery against the outcome of our MTR during the remainder of PC21 through our established Annual Information Return and Cost and Performance Report processes. This will provide stakeholders and consumers with visibility on how NI Water is delivering against these 'baseline' requirements and the impact that any funding constraints applied outside our price control process might have had.