NI Water Response to the PC21 Draft Determination

Main Report

16 December 2020

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1 EXECUTIVE SUMMARY

1.1 INTRODUCTION

1.1.1 We welcome the opportunity to respond to the Utility Regulator's Draft Determination (the Draft Determination) for the six year price control period from April 2021 to March 2027 (PC21). The Board of Northern Ireland Water (NI Water) has carefully considered the Draft Determination. Our response is intended to further inform and assist the Utility Regulator in producing its Final Determination in March 2021. The Board of NI Water has developed a Business Plan for PC21 which is designed to continue the programme of delivery of efficient world class services deserved by the consumer in Northern Ireland. Our response to the Draft Determination sets out strong evidence based on sound regulatory rationale and principles which will support the Regulator in reaching a significantly improved Final Determination which also supports the consumer in Northern Ireland in enjoying progress towards a deserved world class service.

1.2 OBSERVATIONS ON THE UTILITY REGULATOR'S PROPOSALS

1.2.1 Our PC21 Business Plan is strong, challenging and ambitious. It includes significant efficiency gains that enable us to continue improving services for our customers, whilst at the same time delivering material cost savings that allow us to keep bills stable in real terms. It also commits us to deliver a step change in capital investment to address generational underfunding for our wastewater assets, which has already resulted in curbs to economic development across Northern Ireland. It is a balanced, but demanding, package for the 6-year PC21 period.

1.2.2 We welcome that the Draft Determination recognises many of the strengths in our Business Plan – improved efficiency, support for the step change in capital investment as well as support for a medium term funding commitment, improvements in levels of service for customers and stable tariffs.

1.2.3 The Board of NI Water has carefully considered the Draft Determination. Our over-riding concern is that the opex efficiency challenge, combined with an unfunded regulatory recourse mechanism, creates a Determination that poses unacceptable risks to the organisation in providing improving and efficient services to current and future customers. Disallowance of key elements of our 'Planning for the Future' programme, the means by which we plan to deliver our service and cost improvements, compound this further.

1.2.4 In addition, we believe the application of a 6.7% 'Generic Reporter Adjustment' to the capital investment programme is not supported by evidence.

1.2.5 Without changes to address these matters and so ensure a more balanced package, the Board would be unable to accept the determination.

1.2.6 With the above in mind, we are keen to use this response to constructively engage with the Utility Regulator in order to ensure the Final Determination addresses our concerns, based on comprehensive analysis and evidence, so allowing the Utility Regulator to reach a balanced Final Determination. The key themes are summarised below.

Operating Costs

1.2.7 We welcome that the Utility Regulator has recognised the need for and has allowed a significant proportion of the new and additional operating costs we present in our plan. However, the proposed allowance for new costs falls short of the funding we require to operate our regulated business during PC21. In Chapter 3, we provide clarification on those costs which we think the Draft Determination has incorrectly disallowed. In particular we highlight the following:

- We understand £14.4m costs for 'Digital, Cyber and Move to Cloud' were disallowed due to insufficient evidence. We have included additional evidence as part of our Draft Determination response which we think will give you the confidence to ensure these essential costs are allowed in your Final Determination.
- We understand £12.2m of 'Pension service cost' has been disallowed on the basis of a bottom up assessment by GAD on a cash contributions basis.

NI Water's obligation is to meet its pension contributions, on behalf of its employees, to the satisfaction of the trustees and The Pension Regulator. We have included the latest information and will continue to engage with the Utility Regulator ahead of the Final Determination.

- The Draft Determination has disallowed £2.24m Opex from Capex on the basis of recommendations made by the Reporter. The Reporter's recommendations were based on an early, incomplete version of our detailed Opex from Capex review. Whilst we accept the Reporter's findings, the final version of our review provides evidence that a further £2.5m should be allowed in your Final Determination.

Operating Cost Efficiencies

1.2.8 NI Water's PC21 Business Plan is ambitious in its aspiration to continue to close the opex efficiency gap in PC21. We worked collaboratively with the Utility Regulator in the Cost Assessment Working Group (CAWG) to develop new econometric models. In our PC21 Business Plan, using these models, we assessed the efficiency gap to be 7.3% to the upper quartile companies in England and Wales and we proposed that we would eliminate 80% of the gap by 2026-27. The Draft Determination assesses the efficiency gap to be 7.8% and also assumes that NI Water can close 100% of the gap by the end of 2025/26.

<u>Assessment of the Efficiency Gap and Catch-up</u>

1.2.9 We believe that the efficiency gap, used to determine the catch-up efficiency targets, does not accurately reflect our relative opex efficiency. There are two reasons for this - firstly, the negative special factor adjustment applied has been overstated and secondly, the assessment of wastewater opex efficiency does not take account of the clear improvement in wastewater efficiency over the last number of years. In our response, we set out credible evidence which suggests an efficiency gap in the range 3.5% - 4.0% is more realistic.

1.2.10 As well as overstating the efficiency gap, the Draft Determination infers that 100% of this gap must be closed by the second last year of PC21. In so doing the Utility Regulator makes no allowance for our government owned status and

the restrictions it places on the pace at which efficiencies can be delivered. It is also inconsistent when compared to capital maintenance catch-up where the Utility Regulator has proposed 80% gap closure despite there being no obvious reason for the inconsistency.

Application to Business Rates

1.2.11 We disagree that a catch up efficiency target should be applied to our LPS local authority business rates. By so doing, the Utility Regulator implies that we must reduce this cost by £4m (or 13%) by the end of PC21. There is limited, if any, scope to reduce LPS Rates cost by that extent, a principle acknowledged by both Ofwat and the CMA in other regulatory jurisdictions. While this has been the Utility Regulator's approach in previous price controls, and previously contested by NI Water, it is inconsistent with the approach taken by the Utility Regulator in the local gas and electricity price controls as well as being inconsistent with regulatory approaches in England, Wales and Scotland.

Frontier Shift – productivity growth

1.2.12 The approach used in the Utility Regulator's Draft Determination to assess the scope for productivity growth gives too much weight to the period prior to the financial crisis. This was a period of relatively very high productivity growth which has not been repeated since and on that basis is unrealistic, especially in the context of the ongoing COVID-19 pandemic. It also ignores the fact that Northern Ireland is acknowledged to be a low productivity economy.

1.2.13 Within the process of the Price Control we have provided clarification, additional robust analysis and evidence to support our position. We trust that the clarifications and additional information provided will provide the Utility Regulatory with the assurance it needs when reviewing certain elements of its conclusions in relation to the operating cost efficiency in the Final Determination.

Capital Investment Programme

1.2.14 We welcome that the Utility Regulator has, in the main, agreed with and accepted our proposals for capital investment. It has recognised the need for

a step change in the level of investment to address generational underfunding for our wastewater assets which, critically, is resulting in curbs to economic development across Northern Ireland.

1.2.15 We note that the Draft Determination has led with £1.7bn capital requirement in 2018/19 prices rather than the £1.95bn in nominal terms. While we, as the regulated utility, understand that a price control is determined relative to a base year, we think it is essential for the benefit of others that the figures quoted in the public domain are in nominal figures. We urge the Utility Regulator to consider this for the Final Determination.

1.2.16 One of the strengths of the PC21 capital planning process is the good working arrangements between the Principal Stakeholders in the Output Review Group and its sub-groups and the priorities set out in the draft Social and Environmental Guidance. These factors have combined to provide NI Water with the necessary guidance on the priorities for investment.

Capital Efficiency and Generic Reporter Adjustment

1.2.17 We are pleased the Utility Regulator has accepted our proposals for capital efficiency and they have been recognised as good industry practice.

1.2.18 However the Utility Regulator has applied a Generic Reporter Adjustment (GRA) which equates to a 6.7% reduction in pre-efficiency costs on a significant number of PC21 projects. This results in a net deduction of £94m (18/19 prices) compared to our PC21 Business Plan.

1.2.19 We believe that the logic from which the GRA is derived is not based on evidence and is flawed. NI Water further believes that the GRA is not appropriate, as it results in cost estimates that do not represent realistic costs for delivery of the outputs and outcomes required during the PC21 period.

1.2.20 NI Water has undertaken a series of benchmarking exercises which demonstrate that cost estimates generated through our costing system compare favourably with historic NI Water and wider industry costs.

1.2.21 The GRA was largely based on the Reporter's contention that post-tender risks included in NI Water's costing methodology to account for contractual issues were a duplication of the pre-tender risks included to account for uncertainty of scope definition at Business Plan submission stage. The Reporter recommended that the post tender risk component should be removed. We understand that the Utility Regulator has based its Draft Determination GRA deduction on removal of a proportion of the post tender risk rather than the full amount.

1.2.22 We explain our rationale for refuting the GRA in Annex 5.3. This Annex provides evidence to demonstrate that post-tender risk is not a duplication of pre-tender risk and presents the results of the benchmarking exercises which demonstrate that the costs derived for the PC21 projects are realistic.

Capital Maintenance

1.2.23 NI Water welcomes that the Utility Regulator acknowledges that the step change in the capital investment programme brings a quantity of 'consequential' base maintenance with it. This will help prevent the diversion of capital maintenance funding associated with our increased enhancement programme away from the other essential maintenance activities, which is essential to maintain serviceability to our customers.

1.2.24 The Utility Regulator has not allowed £33m consequential capital maintenance on our Management and General programme. NI Water believes that there is evidence that supports the case for consequential capital maintenance on at least part of this sub programme.

1.2.25 NI Water notes the Utility Regulator's comments regarding the disallowance of £33m of capital maintenance in relation to mature compliance model. We are developing an evidenced plan to clearly demonstrate that the investment will secure compliance in the longer term. This plan will form a development output for delivery in the early part of PC21. More details on this development output are provided in Chapter 5.

Planning for the Future

1.2.26 In our Business Plan, we set out proposals in relation to 'Planning for the Future', the programme of work required to continue our transformational journey to achieve our proposed efficiencies. We note key elements of this have been disallowed in relation to: energy efficiency, electric vehicle charging as well as smart metering. We have reviewed and strengthened the justification for these projects as part of our Draft Determination response and will be keen to engage with the Utility Regulator prior to the Final Determination.

1.2.27 A key element of 'Planning for the Future' investment was our Intelligent Operations Centre enabling us to be smarter at using our vast amount of data and working in a more joined up way to predict and prevent asset failures. As the Draft Determination suggests, we are reviewing our plans in light of COVID-19 impact on ways of working and will update the Business Case accordingly.

Programme to deal with Uncertainty

1.2.28 We are supportive of the approach the Utility Regulator has proposed to manage uncertainty in our wastewater proposals. Many of our Drainage Area Plans will only complete in the next two years, so we welcome the opportunity to complete further assessments and improve the costing of our wastewater treatment works and UID solutions before they are committed. We provided a programme to the Utility Regulator on 30 November 2020 and we will continue to refine this to inform the Final Determination.

Living with Water Programme (LWWP)

1.2.29 We note that the Draft Determination has included proposed LWWP investment within customer tariffs rather than assuming a separate source of grant funding. In assuming grant funding, we took the view that customers today should not have to pay for past underinvestment by government. Having said that, we are content with the Utility Regulator's approach. In order for the objectives of the Business Plan to be achieved it is now essential that the Department for Infrastructure secures Capital DEL for LWWP and the wider PC21 capital investment programme.

Delivery Profile

1.2.30 NI Water acknowledges the challenge of delivering the stepped increase in investment, particularly over the early years of PC21. We have reviewed the profile submitted in our PC21 Business Plan and revised this to reflect our most up to date knowledge of all influencing factors, including timescales to secure resources and mobilise our contractor base. Our revised profile is included in Annex 5.20.

1.2.31 NI Water intends to monitor the delivery of key milestone dates in PC21 as a lead indicator of successful delivery of the capital programme and welcomes the Utility Regulator's proposal to do likewise.

Commitment to Medium Term Funding

1.2.32 We welcome the Utility Regulator's support for a commitment to medium term funding and the acknowledgement that investment of the magnitude proposed in PC21 can only be delivered successfully if a funding commitment is secured. We are acutely aware that the start of PC21 is now less than four months away. We would welcome joining with the Utility Regulator in an urgent senior stakeholder conversation on how a commitment to funding this programme is secured for the full six years (or certainly the first 3 years as a minimum).

Outputs

1.2.33 We welcome that the Utility Regulator has, in the main, agreed and accepted our proposals for outputs and outcomes, which are intrinsically linked to our capital investment and improvement programmes.

1.2.34 The collaborative working of the PC21 Consumer Engagement Oversight Group (CEOG) has also been influential in ensuring that we build customer views into our plans and put customer needs at the heart of our service delivery. We are pleased that new metrics for customer experience have been accepted, as well the proposed targets.

1.2.35 The rationale for introducing our new customer measures is that they are more representative of our customers' experience. In our view, DG6, DG7 and DG9

have the potential to drive the wrong behaviours. While we populated the PC21 tables with PC15 Final Determination targets, we believe these should be dropped as targets in PC21.

1.2.36 We look forward to continuing to work with the Utility Regulator and other stakeholders on CEOG and the CM/SAT working group to identify opportunities for new customer metrics and KPIs, including those relevant to our customers who find themselves vulnerable.

1.2.37 The Draft Determination proposes setting more challenging targets in relation to DG3 Overall Performance Score and water mains activity. NI Water would be willing to accept these more challenging targets.

1.2.38 The Draft Determination has reduced the number of Water Treatment Works schemes by 4 relating to Alpha PPP sites and the associated £7.4m enhancement investment. We have provided clarification on the appropriateness of funding this investment.

1.2.39 In relation to sewerage service outputs, we are pleased that new metrics for removal of economic development constraints have been accepted, as well the proposed targets. We welcome the Utility Regulator's support in messaging that PC21 will only begin to solve the problem of development constraints – it will take several price controls to rectify.

1.2.40 NI Water is unwilling to accept the more challenging targets set for reduction in pollution incidents and wastewater treatment works compliance. We think the approach taken by the Utility Regulator fails to recognise the context of the challenges facing the wastewater assets due to capacity issues and preparation for Water Regulation Reform. We have reviewed the Draft Determination methodology and have proposed revised targets for these metrics which improve upon our PC21 Business Plan position.

Price Limits

1.2.41 Price limits in the Draft Determination reflect the revised customer forecasts prepared in July 2020 as the impact of the COVID-19 pandemic on customer

demand was becoming apparent. We welcome this and the offer by the Utility Regulator to consider any further revisions.

Cost of Capital

1.2.42 In the Draft Determination, the Utility Regulator has proposed a significant reduction to the cost of capital. We acknowledge that the analysis underpinning this was carried out in March 2020 (pre COVID-19). We note the CMA's recent provisional determination in relation to PR19 appeal, which points to materially higher returns on equity. In light of this, we would expect to see the cost of capital increase significantly from the level proposed in the Draft Determination when the Utility Regulator revisits cost of capital for the Final Determination.

1.2.43 Whilst under current funding and governance arrangements, there is no direct link between the Weighted Average Cost of Capital and investment, over the long term it is essential that price limits properly reflect the levels required to ensure both external debt and equity finance can be secured. A failure to do this potentially gives rise to a 'cliff edge' effect in future, that could severely limit (or complicate) future governance, regulatory and funding options for water and wastewater service provision in Northern Ireland.

Financial Sustainability

1.2.44 We welcome the inclusion of additional regulatory depreciation within regulated revenues and agree with the Utility Regulator that the approach adopted since PC10 may have resulted in existing customers paying too little, shifting the burden on to future customers. We commit to assisting the Utility Regulator with the review of 'broad equivalence' prior to PC27.

Monitoring Delivery and Managing Change

The COVID-19 crisis presents short and long-term challenges for all organisations and its impact will remain uncertain for some time. From our perspective, the key impacts since government restrictions in March 2020 have included change in customer demand, increase in non-domestic bad debt, additional costs associated with purchase of PPE and implementing social distancing and temporary suspension of the capital programme.

1.2.45 Some of this same uncertainty applies to Brexit. Less than three weeks from the end of the transition period, it is unclear whether the UK will be exiting with or without a deal and what that means for trading arrangements.

1.2.46 Other than revised customer forecasts to reflect COVID-19 change in customer demand, no other impacts have been included in our Business Plan or reflected in the Draft Determination.

1.2.47 In an ideal world, we would be able to provide an indication of the impact and have it included in the Final Determination however there are significant difficulties in assessing the impact of both COVID-19 and Brexit at this juncture which is why a funded regulatory recourse mechanism is essential.

Financial Resilience

1.2.48 Draft Determination references relating to resilience focus on operational resilience. Clearly operational resilience is essential and at the heart of our business but we would urge the Utility Regulator not to lose sight of the wider aspects of resilience including financial resilience.

1.2.49 In our Business Plan, we set out the range of 'levers' that English and Welsh water companies have to mitigate the impact of cost shocks. These levers include building up cash reserves, access to large overdraft facilities, increasing their borrowing, flexing their capital investment programme between years, moving expenditure between opex and capex, cutting dividends, equity injections, equity reductions and significantly increasing the size and scope of their commercial insurance programmes.

1.2.50 As a NDPB, these levers are ordinarily not available to NI Water. In the event that one or a number of these were to become available to NI Water, it would likely not be at the required level to make it useful.

1.2.51 The Draft Determination refers to the Memorandum of Understanding and Consequent Written Agreement as established processes to manage change.

To the reader, this implies that the mechanisms are in place and are working well. We should, all of us, be clear, this is not the case.

1.2.52 The Memorandum of Understanding makes provision for 'relevant items' which is essentially a risk pot to be held by the Department, outside of a determination, for unforeseen cost shocks. 'Relevant items' have not been funded since 2013/14.

1.2.53 The extent of uncertainty going into the PC21 Final Determination is significantly heightened (relative to previous price controls), due to the combination of COVID-19 and Brexit, as mentioned above. This is compounded in the Draft Determination by an opex efficiency challenge which pushes many of the components to a point where collectively they drive risk to a degree which we believe to be unacceptable for the organisation and its customers.

1.2.54 It is therefore vital, now more than ever, that a funded regulatory recourse mechanism is in place to provide headroom to manage risk and unforeseen cost shocks. This is essential to ensure NI Water is financially resilient and adequately funded to finance it functions and protect services to our customers.

NI Water Governance and Funding

1.2.55 NI Water continues to operate as both a Government Owned Company (GoCo) and a Non-Departmental Public Body (NDPB) and so is subject to annual Public Expenditure (PE) funding. This governance structure provides additional challenges to the organisation and limits the pace at which efficiencies (both cost savings and service quality improvements) can be made.

1.2.56 NI Water is committed to consolidating the improvements made to date and continuing the drive for higher standards of service to customers and improved efficiency through PC21. Our PC21 Business Plan does not lead with the limitations posed by differences between NI Water and our comparator companies in England and Wales, but we do rightly recognise the constraints of our unique governance structure.

1.2.57 While the Utility Regulator recognises that our dual status adds complexity to our governance (and impacts on the decisions made by NI Water as we seek to deliver investment, outputs and improve services), we do not believe its impact has been reflected in the Draft Determination.

1.2.58 As a NDPB, NI Water is subject to the annual government budgetary cycle and in-year monitoring rounds as well as being required to comply with onerous public sector procurement requirements. Compared to the companies we are benchmarked against, we face more uncertainty over long term investment planning and we have less commercial freedoms to restructure and make decisions in key areas such as procuring external support for business restructuring, staff remuneration and incentivisation.

1.2.59 The Board must view the Draft Determination through the lens of the day to day limitations of our dual status. As we consider the combined impacts of: the rate and pace of efficiency catch-up; the increased productivity challenge; the GRA challenge; uncertainty related to COVID-19; Brexit and the absence of a regulatory recourse mechanism, we believe the Draft Determination package under-estimates the impact our dual GoCo / NDPB status.

1.2.60 Since inception in 2007 of NI Water and a regulated model for water and wastewater services, great progress has been made with all stakeholders contributing to some degree. However, the limitations and sub-optimal nature of the dual status model have been acknowledged on record by all Water Senior Stakeholders, including the Utility Regulator, for some time now. The consequential follow on to that acknowledgement is that the resultant risk and the significant cost burden inevitably passes on to customers in reduced pace of improved delivery and significant tariff disadvantage. Stakeholders must consider that customers should not have to pay for the inefficiency that the sub-optimal governance arrangements produces.

1.3 CONCLUSIONS

1.3.1 We acknowledge that the primary role of the Utility Regulator in the water industry in Northern Ireland is to protect the interests of consumers (both today and in the future) and we are supportive of that. Consistent with this, the NI Water PC21 Business Plan proposed by us in January 2020 seeks to balance service delivery and consumer interests with continuing efficiency over both the near and longer-term. Our concern is that, in practice, the Draft Determination does not adequately balance these considerations, to the detriment of customers.

1.3.2 Our overriding concern is that the opex efficiency challenge in particular (combined with an unsatisfactory regulatory recourse mechanism) creates a Determination that poses unacceptable risks to the organisation. The disallowance of key elements of our 'Planning for the Future' programme compound this further. We also believe the application of a 6.7% 'Generic Reporter Adjustment' to the capital investment programme is not supported by evidence. In light of this, without these points being addressed at the Final Determination, the Board would not be able to accept the settlement.

1.3.3 We are keen to work constructively with the Utility Regulator to ensure the Final Determination is appropriately balanced. As such, NI Water provides evidence and comprehensive analysis to support this position in the remainder of this response.

The Board of NI Water is confident that our response will provide the Utility Regulatory with the information and confidence it needs to arrive at a Final Determination that will be deliverable by NI Water and acceptable to the wider water stakeholder group.

2 INTRODUCTION

2.1 STRUCTURE OF THE RESPONSE

2.1.1 This chapter outlines the structure of NI Water's response to the Utility Regulator's Draft Determination proposals.

2.1.2 Subsequent chapters deal with the following matters:

- Chapter 3 deals with operational costs;
- Chapter 4 deals with operational cost efficiency;
- Chapter 5 deals with capital investment and efficiency;
- Chapter 6 deals with outputs and outcomes;
- Chapter 7 deals with price limits and other financial matters;
- Chapter 8 responds on monitoring delivery and managing change; and
- Chapter 9 proposes next steps.

2.1.3 This main response document focuses on responding to the main themes of the Utility Regulator's PC21 Draft Determination. For some themes the response and/or further supporting detail is provided in Annex documents.

2.1.4 We have not sought to answer every query raised by the Draft Determination in the main response document. We have provided a set of spreadsheets (Annex 5.1) which links queries raised by the Draft Determination to our response. Where NI Water's response is short, text has been provided in the spreadsheets.

2.2 PRICE BASE

2.2.1 In line with the Draft Determination, all costs referred to in this Response are in 2018/19 prices unless otherwise stated.

3 OPERATIONAL COSTS

SUMMARY

This chapter responds to the Utility Regulator's proposals with respect to operational costs i.e. the allowance for operational costs before efficiencies.

The Draft Determination proposes an allowance for operational costs (before efficiencies) in PC21 which falls short of the funding NI Water requires to operate its regulated business during PC21. We provide clarification on those costs which we think the Draft Determination has incorrectly disallowed.

Since the Business Plan was submitted we have identified the need for additional operating costs to support an enhanced reservoir inspection regime; we have included supporting evidence for this in our response.

3.1 OVERVIEW

3.1.1 In our PC21 Business Plan, we identified the need for £97.74m new and additional operating expenditure (opex). The Draft Determination allows £62.06m of these increases. Table 3.1 below sets out NI Water's submitted figures and the shortfall against the proposed allowance in the Draft Determination.

Table 3.1: Variance in Opex Prediction and Allowance

	NI Water Proposed (£m)	Utility Regulator Allowed (£m)	Variance (£m)
Pensions - service cost	12.22	0.00	(12.22)
Capitalisation	(1.69)	(1.69)	-
Consultants Fees (PC21/PC27)	0.60	0.50	(0.1)
Rates	33.00	26.24	(6.76)
Leakage	2.74	2.74	-

	NI Water Proposed (£m)	Utility Regulator Allowed (£m)	Variance (£m)
Mature Compliance (WW)	11.24	11.24	-
Digital, cyber and move to cloud	19.14	4.78	(14.36)
Kinnegar operating costs	3.24	3.24	-
Opex from Capex	17.25	15.01	(2.24)
Total	**97.74**	**62.06**	**(35.7)**

3.1.2 We welcome that the Utility Regulator has recognised the need for and has allowed a significant proportion of the new and additional operating costs outlined in our plan. However, the proposed allowance for new costs falls short of the funding we require to operate our regulated business during PC21. We believe there are grounds to challenge some aspects of each disallowance. The following sections deal with each of these aspects in more detail.

3.2 PENSION – SERVICE COSTS

3.2.1 In the PC21 Draft Determination, the Utility Regulator has disallowed all of our increase in pension costs. The decision reached here by the Utility Regulator was based on advice provided by the Government Actuary's Department (GAD) following their assessment of our defined benefit scheme, the NI Water Limited Pension Scheme (NIWLPS). Within our PC21 Business Plan, we used IAS19 as the basis of evaluating pension costs forecasts for the PC21 period, whereas GAD used Technical Provisions/Cash Contributions as the basis of their assessment. We disagree with this and remain of the view that IAS19 continues to be the most appropriate method to assess the NIWLPS on an ongoing basis for the following reasons:

- **It better reflects the nature of the NIWLPS scheme** - NIWLPS is a relatively immature scheme which remains open to new entrants. In this regard, it is very different to mature schemes (to which it would appear GAD have compared the NI Water scheme) with a much smaller or even zero proportion of active members. For such schemes the cost of new accrual is immaterial compared with the liabilities/deficit of the scheme, and therefore the main focus is on the deficit contributions required or

management of any surplus. We also note that the majority of open defined benefit schemes in the UK currently use IAS19 basis.

Most defined benefit schemes are now closed to at least new entrants and have started the de-risking to “end game”. This means they are often more mature and have a lower risk investment strategy and lower discount rates.

- **It provides for enhanced stability** - IAS19 allows for a more stable annual cost as it reflects the long term strategy and position of the scheme, as the standard establishes the principle that the cost of providing employee benefits should be recognised in the period in which the benefit is earned by the employee, rather than when it is paid. This will include making various financial, actuarial and mortality assumptions. Consequently, recognising the cost of a continued benefits accrual on a long term stable basis is critical. Linking the budgeted cost to the corporate bond yield provides much more stability in the long term, since it irons out, to an extent, the significant volatility caused by holding assets that do not match the liabilities.

  The technical provision approach, however, reflects the annual cash contributions paid by the company to the pension scheme at a particular valuation date as it will reflect the cash required in the short term to ensure the scheme is adequately funded. It is therefore subject to change every three years as part of the triennial valuation and consequently has a greater degree of volatility. It should also be noted that the PC21 period spans three separate valuation dates and at each subsequent valuation the position could be materially better or worse than it is at the moment, depending on how assets, particularly the return seeking assets, have performed. The resulting cost volatility could also impact tariff stability. In contrast, the IAS19 approach smooths the valuation impact.

- **It represents the most prudent approach** – the majority of pension schemes necessarily use the most prudent form of valuation available. For most schemes the Technical Provisions would be more prudent than the IAS19 basis and result in bigger deficit and bigger future service rate. Hence funding under Technical Provisions basis would require higher

contributions than under IAS19, however that is not the case for NI Water. We cannot take a risked position today which could give rise to future service costs not being met. To do so would likely not be agreed to by the NIWLPS Trustee Board, nor would it be endorsed by The Pensions Regulator (TPR). Given the open nature of the scheme, it must be viewed through a long term lens.

If the NIWLPS remains open then the Technical Provision's will always be less prudent than the IAS19 basis due to the return seeking assets etc. with the main driver at present being the discount rate i.e. Technical Provisions used gilts +1.7%, whereas IAS19 is around gilts+1%. Note as above, it is unusual for the Technical Provision discount rate to be higher than IAS19 and that is a nuance of NI Water.

- **It enhances comparability** - IAS19 is the internationally recognised accounting standard for the measurement and reporting of employee benefits and, along with other IFRS, is the basis on which all large corporate entities account for defined benefit pension plans. IAS19 prescribes a "market based" approach with a discount rate linked to corporate bond yields. Prescribing the discount rate enables more accurate comparison of accounting treatment between corporate entities, particularly in relation to service cost, i.e. the cost to the company of providing ongoing accrual of benefits assessed on a long term realistic rate.

3.2.2 We note that the Utility Regulator does not prescribe a method to "measure" the cost of the pension scheme and is content with the use of IAS19 for regulatory reporting and the IAS19 valuation for pensions within our baseline. We also note GAD's recommendation to the Utility Regulator that they: *"may wish to engage NIW further on this point to understand the rationale and to ensure that the pension costs requested are assessed on a suitable basis."*

3.2.3 We would be keen to engage further with the Utility Regulator on the point and we offer a further workshop based discussion on the subject if the Utility Regulator would find that useful. However, we see no appropriate reason to

move away from IAS19, which is a consistent and universally recognised approach.

Updated valuation

3.2.4 Since the initial set of PC21 projections were provided in the Business Plan, we have had the preliminary results of the actuarial triennial valuation at 31st March 2020. The preliminary results indicate that there will be a significant change in values as a result of lower discount rates due to falling corporate bond yields. Using a consistent level of prudence, the deficit has increase materially since the previous valuation and likewise cash contributions will also need to increase from current levels. This further highlights our concerns with the use of the funding basis as a "measure" of the costs of the pension scheme.

Net Interest Costs

3.2.5 NI Water would also point out that the full IAS19 cost, including net interest costs, were included within the revenue requirement in our PC21 Business Plan. In line with our regulatory reporting, net interest costs were netted off within operating costs and included separately as a finance cost. These costs were not assessed within operating costs and were excluded from claimed finance costs.

3.3 LPS BUSINESS RATES

3.3.1 At the time of our PC21 Business Plan submission, NI Water estimated that as a result of the Reval2020 exercise business rates would rise by £5.5m per annum. After the Business Plan was submitted, Land and Property Service (LPS) provided NI Water with revised valuations (Nett Annual Values), which indicated a lower increase of £4.4m. This was shared with the Utility Regulator and has been reflected in the Draft Determination which accounts for the lower allowance.

3.3.2 It is worth noting that LPS have not confirmed these revised valuations are final and there is a possibility further revisions may be made by LPS. We continue to work closely with LPS and we will make the Utility Regulator aware of any further changes so that they can be reflected in the PC21 Final Determination.

3.4 MATURE COMPLIANCE MODEL (Reforming Wastewater Compliance Assessment)

3.4.1 NIEA has commenced a project to align the reporting of wastewater compliance at wastewater treatment works and in the sewer network with the rest of the UK. This new regime will be developed during PC21 for implementation in PC27. The opex included in the PC21 Business Plan and provisionally allowed in the Draft Determination targets opex interventions to improve the normal operation of wastewater treatment works and support the work of NIEA in developing the new regime.

3.4.2 Obviously this new regime will have cost implications. In preparation, an initial desktop opex estimate was developed in March / April 2018, which indicated the need for an annual expenditure of approximately £2.0m per annum to prepare for new mandatory reporting requirements. This was the basis of the Mature Compliance Model cost estimates included in our PC21 Business Plan.

3.4.3 Since then a further desktop exercise was carried out to re-assess if the original opex estimate of £2.0m was still appropriate. This review was based on 34 sites randomly selected in order to avoid bias against process type, performance of asset, location or age. This represents approximately 15% of the full list of sites with numeric consents and it is felt this is a representative sample size to draw some conclusions from.

3.4.4 The 34 sites were evaluated using up to date information and detailed analysis of NI Water's corporate systems such as Ellipse (Mobile Work Management) and referencing existing opex frameworks, such as sludge tankering and provision of chemicals, to establish a more accurate opex estimate.

3.4.5 The results can be found in Annex 3.1. The revised opex estimate for the 34 sites yielded an increase of approximately 22% in labour, chemical and sludge tankering costs assumed within the original 2018 figure. The main reason for the increase is the inclusion of overtime (mostly weekend working), travel time and the use of Ellipse for a more accurate estimate of what time is required at each site. Also, further consideration was given to site specific activities such

as deep cleaning membrane bio-reactor (MBR) panels (Aghalee) and cleaning of UV plants (Portaferry).

3.4.6 A parallel assessment was made to determine if there were any base maintenance related activities that could help with compliance. These items are also listed in Annex 3.1. It is assumed these base maintenance requirements would be drawn down from the £33m identified in the Mature Compliance capital expenditure bid. It is understood that some sites will require a full capital solution and these are mainly in the Red (Severe) and Red (High) categories[1], most of which are catered for in the PC21 Business Plan. Equally, there are some sites which can potentially achieve a "steady state" performance with an 'opex-only' intervention and these are most likely to be in the Green category. There are a number of sites, however, which would benefit from a blend of base maintenance and opex interventions. 11 sites out of 34 were determined to be in this category. It is estimated that implementation of those capital expenditure interventions could potentially reduce the opex requirements of the 11 sites by approximately 10%, resulting in an overall reduction of approximately 4% to 18% for the 34 sites.

3.4.7 We have reflected these revised opex estimates in an updated Mature Compliance opex profile as summarised in the table below. It is assumed the tankering, chemical costs and sampling costs will be incurred from the start of PC21, whilst it is estimated that approximately 75% of the labour cost is a more realistic level of expenditure in Year 1, given the time required to complete the recruitment process and have the new Full Time Equivalents in post. It is worth noting, however, not all the labour costs are directly attributable to FTE.

Table 3.2: MCM revised opex profile.

£m (2018/19 prices)	21/22	22/23	23/24	24/25	25/26	26/27	PC21 Total
Labour	1.0	1.5	1.5	1.5	1.5	1.5	8.5
Tankering/chemicals	0.5	0.5	0.5	0.5	0.5	0.5	3.0
Sampling	0.1	0.1	0.1	0.1	0.1	0.1	0.6
Regulatory	0.1	0.3	0.3	0.3	0.3	0.3	1.6
Total	**1.7**	**2.4**	**2.4**	**2.4**	**2.4**	**2.4**	**13.7**

[1] Definitions of the RAG categories are included in Annex 3.1.

3.5 DIGITAL, CYBER AND MOVE TO CLOUD

3.5.1 In our PC21 Business Plan we set out our plans for IT services which would see us continue to migrate many of our systems to Cloud based solutions, enhance the security of our IT infrastructure in line with Government requirements and offer our customers more digital based services. The Utility Regulator, based on recommendations from CEPA, has only allowed £4.8m in relation to cyber resilience. The Move to Cloud opex was disallowed on the basis that not enough evidence was provided while the Utility Regulator felt digital services projects should be funded from the cost savings it was intended to deliver.

3.5.2 A modern fit for purpose IT infrastructure is essential to allow NI Water to continue to meet the many challenges we face. In the following sections we have set our further evidence to support our proposals for the opex needed to fund our IT infrastructure.

Move to Cloud

3.5.3 In the Draft Determination, CEPA recommended that no additional opex should be allowed on the basis that our estimates have not been linked to specific systems and there is insufficient evidence to demonstrate the current systems are not fit for purpose.

3.5.4 In response, we have undertaken a detailed review of NI Water's cloud requirements for PC21. The review considered, on a case by case basis, all business applications and systems which have either recently been renewed or will be renewed in PC21.

3.5.5 It should be noted, there are a few offerings in the ICT sector with regard to Cloud services. The main ones are namely Software-as-a-Service 'SaaS' or Platform-as-a-Service 'PaaS'. The difference between these services are:

- 'SaaS' applies when NI Water software and licensing is accessed online, via a Subscription, rather than purchasing the software and hosting on a physical server and installing client application on an end user machine (application will be hosted and accessed via a supplier's cloud server via

the internet). We include Rapid, Ellipse, Oracle, Clear SCADA, LIMS within this category.

- 'PaaS' applies when NI Water rents a computing platform service accessed via an Internet connection. Examples of these are Microsoft Azure or Amazon Web Services. The platform hosts the virtual servers on which the application software resides.

3.5.6 To undertake this review we have adopted a tiered approach, as follows:

i. Identify and assess all business applications that have moved to a cloud based solution in the period since 2018/19, (the costs for which are therefore not included in the 2018/19 baseline).

ii. Identify and evaluate all remaining business applications which will be required to either transition to Cloud or renew, more than likely to a Cloud solution, (specifically to a Software-as-a-Service 'SaaS' offering). Note: Oracle ERP upgrade is included within this cohort, however, given its scale and complexity, it has been separately evaluated, the details of which are provided in section 1.5 of Annex 3.2.

iii. Identify and assess applications which do not have a cloud based road map; we evaluated a transition to an external Platform-as-a-Service 'PaaS' cloud offering via a third-party like Microsoft Azure, to host software that will not migrate to 'SaaS'.

3.5.7 A detailed report summarising all aspects of this review is included in Annex 3.2. Table 3.3 summarises our revised additional cost forecasts arising from this review. Note: these costs are stated in current prices.

Table 3.3: Move to Cloud PC21 opex profile.

£k	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	TOTAL
Existing 'SaaS'	317	317	317	317	317	317	1,902
Projected 'SaaS'	1,068	988	2,178	1,543	3,068	2,068	10,913
'Projected 'PaaS'	40	80	100	120	150	150	640
	1,425	**1,385**	**2,595**	**1,980**	**3,535**	**2,535**	**£13,455**

3.5.8 It should be noted that 'Cloud' is merely the delivery mechanism by which the ICT Directorate aims to provide ICT services to NI Water stakeholders, both internally and externally. The method of ICT delivery, whether 'cloud' or 'on-premises', should not detract from the essential nature of, and requirement for, those ICT services.

Cyber resilience.

3.5.9 CEPA, whilst accepting the need for the investment in cyber resilience, have applied a 25% efficiency challenge to the non-staff element because they did not get access to the sources of the cost assumptions in order to validate them.

3.5.10 Our cost estimates are based directly on recommendations made by Deloitte following their Cyber Resilience audit, the report from which contains an assessment of NI Water's current cyber resilience and a gap analysis with costed estimates.

3.5.11 NI Water would request that the Utility Regulator reviews this report and that the information therein be taken into consideration when assessing the need for a 25% efficiency target. Given the deeply sensitive nature of the report (it references critical national infrastructure matters), it cannot be electronically shared outside NI Water. The document can be made available on appointment for personal inspection by the Utility Regulator or their appointed representatives at either NI Water or the Utility Regulator's offices.

Digital Services

3.5.12 The Utility Regulator disallowed the proposed investment on the basis that it can be funded from the savings it will deliver. We disagree with the Utility Regulator's conclusions in this regard.

3.5.13 The rationale for Digital Services was in part 'spend to save' i.e. it would help achieve efficiency targets we have been set by the Utility Regulator. In that regard, the concept is similar to other initiatives such as the VER/VS scheme or Business Improvement projects, both of which receive additional opex

allowance in order to access savings. We don't therefore understand why this project should be treated any differently to other 'spend to save' projects.

3.6 OPEX FROM CAPEX

3.6.1 The Utility Regulator has allowed £15.01m (18/19 prices) in the Draft Determination for additional Opex from Capex, which is £2.24m less than that claimed in the PC21 submission. This reduced allowance was based on recommendations made by the Reporter following their interim review of previous Opex from Capex projections. It should be noted that as a result of the timing of the Reporters review, they were only provided with an early and incomplete version of Opex from Capex projections which was not fully representative of our final Opex from Capex assessment.

3.6.2 We therefore welcome the offer by the Utility Regulator in the Draft Determination to seek further clarification from the company on the justification for the Opex from Capex figures and acknowledgement that they may need to adjust the allocation further in the Final Determination based on the information provided.

3.6.3 NI Water has now completed a detailed review of Opex from Capex forecasts. The review, which was based on 210 PC21 capital projects, and reflects all adjustments recommended by the reporter in their review. A report summarising detailing our review of Opex from Capex in included in Annex 3.3.

3.6.4 Table 3.4 summarises the cost adjustments resulting from the review. In summary we estimate that by the end of PC21 Opex from Capex will increase to £6.25m (by 2026/27).

Table 3.4: Summary of adjustments to PC21 Opex from Capex forecasts

Project Category	No. of Projects reviewed	OfC per Business Plan £m	Revised OfC as a result of Review £m	Variance £m
Projects, with no Add OfC amendments	76	2.191	2.191	-

Project Category	No. of Projects reviewed	OfC per Business Plan £m	Revised OfC as a result of Review £m	Variance £m
Projects, entailing Programmes of work, with BUD of 31/3/27	22	0.000	1.213	**1.213**
Projects with BUD of 31/3/27	39	0.000	0.549	**0.549**
M&G Projects	27	0.000	0.292	**0.292**
Projects with Add OfC amendments – due to pump errors	7	0.357	0.101	**(0.256)**
Projects with Add OfC amendments – due to storm tank errors only	15	0.222	0.368	**0.146**
Projects with Add OfC amendments - mainly due to sludge errors	2	0.038	0.032	**(0.006)**
Projects with Add OfC amendments - mainly data input/assumption errors	9	0.317	0.264	**(0.053)**
Projects with Add OfC amendments – due to miscellaneous errors (which includes pump/sludge/data errors etc)	11	1.116	0.682	**(0.434)**
Change to Project 'Derg WTW MCPA PEO Undertakings'	**1**	0.913	0.525	**(0.388)**
Total	**210**	**5.154**	**6.217**	**1.063**
Projects not reviewed	16	0.031	0.031	-
Grand Total	**226**	**5.185**	**6.248**	**1.063**

3.6.5 The biggest adjustment between this and our previous results from programmes which in our PC21 Business Plan were identified as having a Beneficial Use Date (BUD) of 31 March 2027 and as such were assessed as having no Opex from Capex impact in PC21. However, in reality these programmes comprise a series of projects which will become operational throughout the PC21 period and therefore Opex from Capex builds from Year 1 through to Year 6. Examples are Abstraction Monitoring, Event Duration Monitors WwPS/CSOs and RWwIP RBC <50PE.

3.7 ADDITIONAL OPERATING COSTS NOT INCLUDED IN OUR BUSINESS PLAN.

3.7.1 Since our PC21 Business Plan was submitted, we have identified the need for further opex to support an enhanced reservoir inspection regime.

Additional Staff Required for Reservoir Inspection Activities

3.7.2 There are currently 45 controlled Impounding Reservoirs (IRs) within NI Water of which 25 are 'In Service' and 20 'Out of Service'. A controlled reservoir is defined as "a structure that can retain in excess of 10,000m^3 above the natural level of the land". NI Water currently maintains the 45 controlled IRs under the spirit of the GB Reservoirs Act 1975. This act applies to 'large raised reservoirs' in Great Britain, and is followed pending bringing into effect the Reservoirs Act (NI) 2015.

3.7.3 The Reservoirs Act (NI) 2015 received Royal Ascent on the 24th July 2015. However, not all parts of the Act have commenced, and with the reestablishment of the Executive and NI Assembly it is anticipated it will take to December 2021 to commence the sections of the Act and associated secondary legislation necessary to introduce the reservoir safety framework in Northern Ireland.

3.7.4 Following the latest round of Section 10 Inspections, the All Reservoir Panel Engineers (ARPE), while acknowledging NI Water follows the spirit of the Reservoirs Act 1975, has highlighted that NI Water's overall inspection regime is currently lagging behind best practice.

3.7.5 As it currently stands there are various inspection reports to be completed and this equates to each of the IRs being inspected once a month as detailed below:-

- Monthly Report A – Monthly except March, June, September by the Water Supply Plant Manager
- 6 Monthly Report B - Twice yearly in March and September by Water Supply Business Unit, This includes detailed instrumentation checks
- Annual Report C - Yearly in June by the Supervising Engineer

- 10 Year Report D - 10 yearly by the independent 'All Reservoirs' Panel Engineer.

3.7.6 The ARPE has recommended site inspections should occur at the majority of sites a minimum twice a week and at some of the larger sites at least 3 times a week. He has also recommended that level and seepage monitoring is increased to similar frequencies. Furthermore, recommendations have been made for increased level monitoring, piezometer reading and testing of valves.

3.7.7 To fulfil the recommendations of the ARPE NI Water will be required to increase its overall inspection regime. As it currently stands, there is not the capacity within the current workforce to satisfy these requirements and additional staff will be required. A detailed assessment was carried out by the Water Supply Business Unit to establish the total frontline estimated days required per year to complete the recommended IR inspections and readings. This study estimated an additional 2519 person-days would be required and this equates to 11.3 staff based on 223 working days a year.

Table 3.5: Reservoir Inspection Staffing Requirements

Activity	Staff No. (FTE)
Reservoir Surveillance Activities	3.96
Recording of Reservoir Levels/Rainfall Levels/Depth of Water at Overflow	1.61
Recording of Seepage Flows	4.5
Settlement Levelling & Piezometer Readings	0.17
Operation and Testing of Key Valves	0.67
Rodding of Drains	0.38
Total	**11.29**

3.7.8 NI Water accepts that some of these activities are already taking place as part of the monthly visits. However it should be noted the number of visits across all sites will increase from 540 to 3,482 visits a year. Given this fact, NI Water has estimated a net increase of 9 staff are required to fulfil the recommended

requirements. A grade evaluation was carried out and it is deemed these staff will be at Grade 1.

3.7.9 In addition given the number of staff and work involved a Reservoir Inspection Manager will be required to manage the additional staff and thus an additional Level 5 will also be required to sit within the Water Production Line. This level 5 will also be responsible for the settlement and piezometer readings at the various sites.

3.7.10 The additional staff are required to ensure that that NI Water can fulfil the requirements of the Reservoirs Act (Northern Ireland) 2015 once fully commenced. The requirements of the Act include:

- A high-consequence or medium-consequence reservoir must, at all times, be under the supervision of a supervising engineer.
- The supervising engineer must monitor compliance by the 'Reservoir Manager' with the requirements of the surveillance and inspection requirements.
- The 'Reservoir Manager' must maintain a written record of each visual inspection.
- Failure by a reservoir manager of a high-consequence or medium consequence reservoir to comply with any of the requirements under the act is an offence.

3.7.11 It is noted that the Inspection Regime for controlled reservoirs by Water Companies within England & Wales is generally in line with best practice. However, through the Controlled Reservoir Safety Forum NI Water received information on the numbers of controlled Impounding Reservoirs each company has and this highlights that NI Water has nearly twice as many controlled Impounding Reservoirs per head of population served compared to E&W. Therefore the costs requested are above and beyond the level incurred in E&W. Our analysis is included in Annex 3.4.

3.7.12 As highlighted above it is estimated that 10 additional staff will be needed to manage and fulfil the recommended inspection requirements. NI Water is committed to establishing these roles within the business albeit on a phased

basis. It would be hoped to recruit at least 7 of these roles by April 2021 (6 Grade 1s and 1 Level 5) with the reminder of the Grade 1s in place by April 2022.

3.7.13 Consequently an additional £2.5m of Opex is required for these roles over the PC21 period.

3.8 ANNEXES

Annexes related to this chapter are as follows:

- Annex 3.1 – Mature Compliance Model – Summary of 34 site Review
- Annex 3.2 – Move to Cloud
- Annex 3.3 – Opex from Capex – Post Business Plan Review.
- Annex 3.4 – Impounding Reservoirs - Comparison with E&W

4 OPERATIONAL COST EFFICIENCY

SUMMARY

This chapter responds to the Utility Regulator's proposals with respect to operational cost efficiencies.

We present evidence which supports our view that the efficiency challenge in the Draft Determination overstates the efficiency gap which remains between ourselves and our peers.

We believe that increasing the catch up target is not justified nor is it supported by relevant evidence or regulatory precedent. This is then further compounded by the continuing absence of a satisfactory, functioning regulatory recourse mechanism.

We are also concerned that the productivity growth assumption places too much weight on the period prior to the financial crisis and is therefore unachievable.

4.1 OVERVIEW

4.1.1 NI Water's PC21 Business Plan is ambitious in its aspiration to continue to close the opex efficiency gap in PC21. We worked collaboratively with the Utility Regulator in the Cost Assessment Working Group (CAWG) to develop new econometric models. On the basis of the information available when we were preparing our Business Plan, we assessed the efficiency gap to be 7.3% to the upper quartile companies in England and Wales (E&W) and we proposed that we would eliminate 80% of the gap by 2026-27.

4.1.2 Using the jointly developed econometric models, the Utility Regulator's Draft Determination assesses the efficiency gap to the Upper Quartile (UQ) companies in E&W at 7.8% and then proposes that we should close 100% of that gap by the second last year of PC21 (i.e. 2025/26).

4.1.3 The Utility Regulator has also proposed a productivity growth challenge of 0.77% which is effectively double the level proposed in our PC21 Business Plan.

4.1.4 Furthermore, the Utility Regulator has applied both catch up and frontier shift efficiency challenge to all NI Water's forecast opex (excluding PPP). In so doing, the Utility Regulator has once again applied the combined efficiency challenge to business rates.

4.1.5 All told, the Utility Regulator has proposed that NI Water must reduce its operating costs by c£23m or 13% by the end of PC21, £4m of which the Utility Regulator is proposing will come from business rates.

4.2 OUR CONCERNS

4.2.1 We believe that the efficiency gap, used to determine the catch up efficiency targets does not accurately reflect our relative opex efficiency. There are two reasons for this - the negative special factor adjustment applied has been overstated and the assessment of wastewater opex efficiency does not take account of the clear improvement in wastewater efficiency over the last number of years.

4.2.2 Not only is the efficiency gap over stated, the rate at which the Utility Regulator proposes we should close 100% of that gap is unreasonable for a government owned company such as NI Water. We also note that the Draft Determination approach to opex catch up differs from that used in the capital maintenance assessment despite there being no obvious reason for the inconsistency.

4.2.3 The approach used in the Utility Regulator's Draft Determination to assess the scope for productivity growth gives too much weight to the period prior to the financial crisis. This was a period of relatively very high productivity growth which has not been repeated since and on that basis is unrealistic, especially in the context of the ongoing COVID-19 pandemic. It also ignores the fact that Northern Ireland is acknowledged to be a low productivity economy.

4.2.4 The Draft Determination compounds this risk by applying the combined efficiency challenge to business rates costs thus implying that we must reduce these costs by £4m or 13% by the end of PC21. There is no scope to reduce rates costs to that extent, especially considering our estate has been significantly rationalised over the last 10 years. The Utility Regulator's treatment is also inconsistent with that of other regulators and indeed with its own treatment of rates in the NI regulated energy sector. Despite indicating in the PC21 Opex 'minded to' Methodology that they would use PC21 as an opportunity to standardise the treatment of NI Water's rates with that of other sectors, this has not happened.

4.2.5 It is concerning that the Utility Regulator makes no acknowledgement of how our governance model might affect our ability to deliver efficiencies of the scale and at the pace proposed in the Draft Determination.

4.2.6 Overall, it appears that in response to what we believe to be a challenging, ambitious Business Plan, the Draft Determination pushes many of the components to a point where collectively they drive risk to a degree which we believe to be unacceptable for the organisation and for its customers.

4.3 THE EFFICIENCY GAP HAS BEEN OVERSTATED

Special Cost Factor adjustments

4.3.1 In our PC21 Business Plan we adjusted efficiency results to take account of two regional Special Cost Factors (SCFs), namely labour rates and power prices. In calculating our adjustments for both, we used the same methodology as that used by the Utility Regulator in previous price controls. However, in the Draft Determination, the Utility Regulator (through their advisors CEPA) has recalculated these adjustments using a different approach resulting in a significant increase in the scale of the adjustment as set out in Table 4.1.

Table 4.1: Opex Special Cost Factor adjustments

	2012/ 13	2013/ 14	2014/ 15	2015/ 16	2016/ 17	2017/ 18	2018/ 19	Average
	Business Plan (2017/18 prices)							
Electricity prices	5.5	5.2	1.2	-1.2	-3.6	-3.1	-1.2	0.4
Regional wages	-2.1	-3.0	-3.4	-1.9	-2.3	-2.8	-2.6	-2.6
Total adjustment	**3.4**	**2.2**	**-2.2**	**-3.1**	**-5.9**	**-5.9**	**-3.8**	**-2.2**
	Draft Determination (2017/18 prices)							
Electricity prices	2.8	1.8	-0.1	-1.2	-1.8	-1.2	-0.9	-0.1
Regional wages	-7.3	-8.6	-6.7	-6.7	-6.8	-6.1	-6.8	-7.0
Total adjustment	**-4.5**	**-6.8**	**-6.8**	**-7.9**	**-8.6**	**-7.3**	**-7.7**	**-7.1**

4.3.2 In our PC21 Business Plan we assessed the efficiency gap to the Upper Quartile (UQ) as -7.3%, which comprised a modelled assessment of 5.2% and a SCF adjustment which equated to a further 2.1%. Using a further iteration of the models (which included 2018/19) the Utility Regulator assessed the efficiency gap at -2.6% pre SCF adjustment. However, because of the increased scale in the SCF adjustment proposed in the Draft Determination, the gap widened by a further -5.2%, to -7.8%.

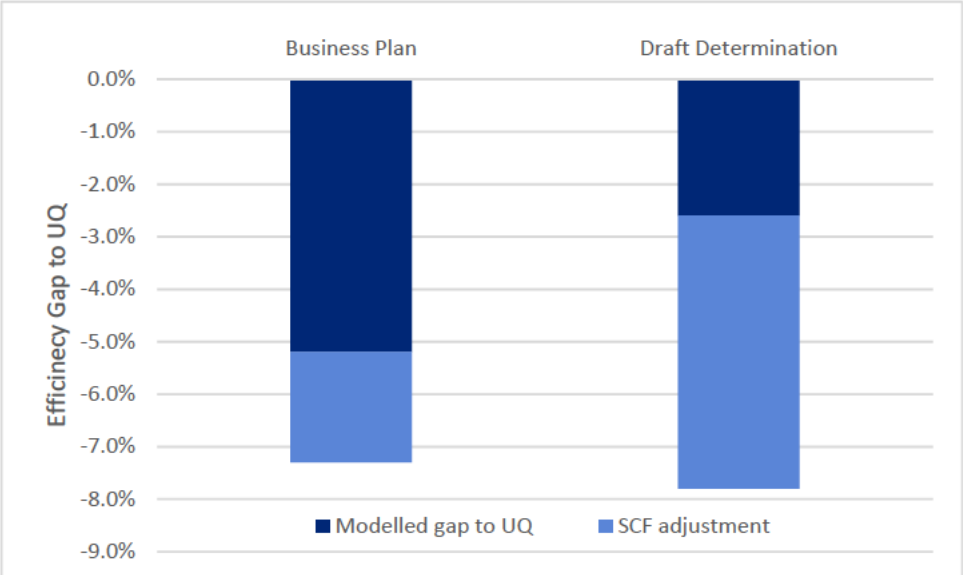


Figure 4.1: Impact of SCFs on efficiency gap

4.3.3 In addition to the specific concerns we have with how the SCF adjustments were calculated (detailed in the paragraphs below), we are also concerned that the inclusion of such material, and largely subjective, adjustments undermine

the overall credibility of the cost assessment results. We would point out that Ofwat does not automatically adjust model results for regional price difference.

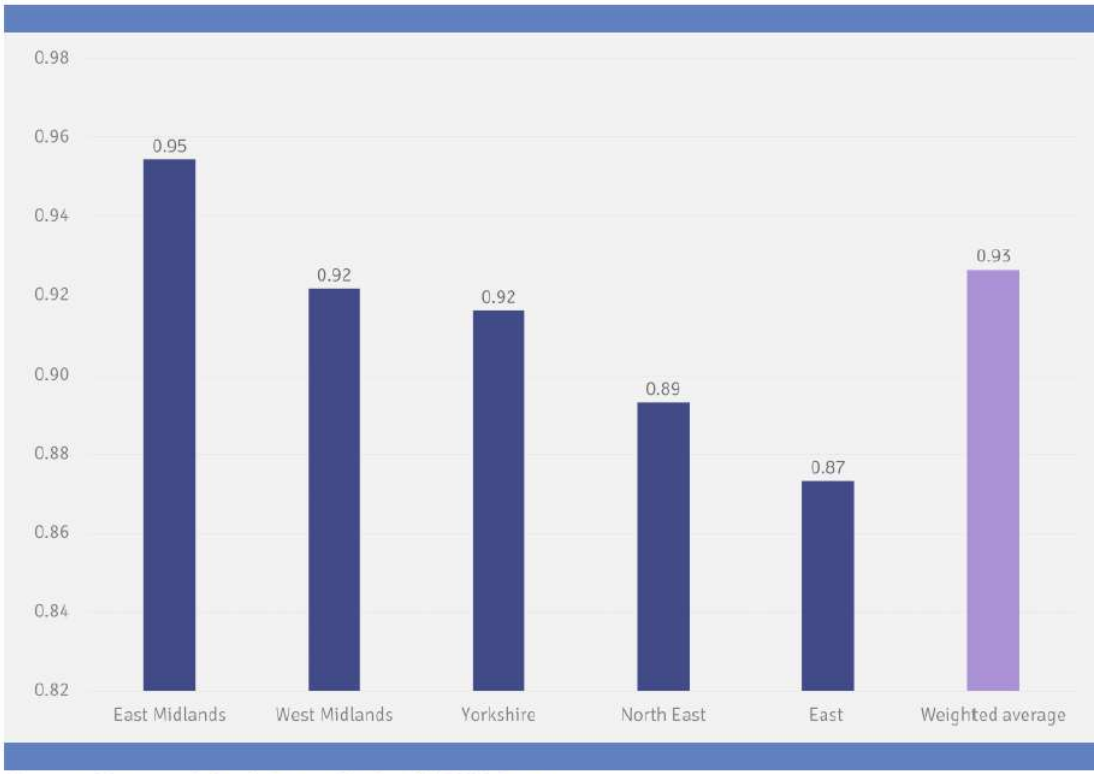
4.3.4 Given the scale of the increase to the labour SCF and its overall impact on our efficiency assessment, we asked our advisors Economic Insight to review CEPA's assessment. Their report is included at Annex 4.1.

4.3.5 In summary, Economic Insight have highlighted several concerns with CEPA's approach namely:

- **Full-time employees vs all employees** - By selecting the 'all employee' ASHE dataset, CEPA implicitly assume that NI Water's share of full-time employees is 72%. In doing so, CEPA place too much emphasis on part-time employees and assume that NI Water has the same mix of full-time and part-time staff as the population as a whole. In practice almost all NI Water's staff are full time.
- **Comparison to the UQ firms vs the rest of the UK -** CEPA estimate the labour Regional Price Adjustment (RPA) by comparing wages in Northern Ireland to wages in the rest of the UK. However, this is not consistent with the efficiency benchmarking process, within which NI Water is compared to the Upper Quartile (UQ) firm, implying that the labour cost assessment should also be based on the labour costs of the region in which the benchmark firm is located**.**
- **There is a lack of evidence that NI Water's input mix is inefficient -** Rather than use NI Water's actual labour costs to derive the SCF, CEPA used that of a representative Ofwat regulated company, thereby implying that NI Waters labour costs are too low as a proportion of total costs and therefore somehow inefficient. However, CEPA do not present any evidence to support this. Results from the efficiency models indicate that NI Water is close to the efficiency frontier, achieving the UQ firm position in the water opex Model 1, for example.

4.3.6 Economic Insight are therefore recommending three changes to CEPA's approach which would lead to more accurate figures:

- **Full time employees only** - In practice, evidence suggests that 97% of NI Water's employees are full time. Given this very high proportion of full-time staff at NI Water, using 100% full-time employees is a better approximation of NI Water's employee mix than the 72% implicitly assumed by CEPA.
- **Comparison to the UQ firms -** For the reasons set out previously, rather than use the whole of the UK, the calculation of the RPA should be based on a comparison between NI Water and the regions in which the UQ companies are located[2]. It is worth noting that this is the same approach used by Utility Regulator in previous price controls. This results in an RPA of 0.93 as shown in figure 4.2 below. (compared with the Utility Regulator's estimate of 0.88)



Source: Economic Insight analysis of ASHE data

Figure 4.2: Labour RPA compared to UQ regions.

[2] As some firms are selected as the Upper Quartile more than once, a weighted average approach is used.

- **Use NI Water's labour input mix** - Given that there is no evidence NI Water's share of labour costs is inefficient, Economic Insight have taken NI Water's actual share of labour costs as the starting point and adjust this to account for cheaper labour costs in Northern Ireland using the labour RPA.

4.3.7 Based on their recommended approach, Economic Insight have estimated that a labour special factor adjustment of -£3.0m per annum is more realistic. Reflecting these revised estimates within the model results would result in a reduction of the opex efficiency gap from 7.8% to 5.2%.

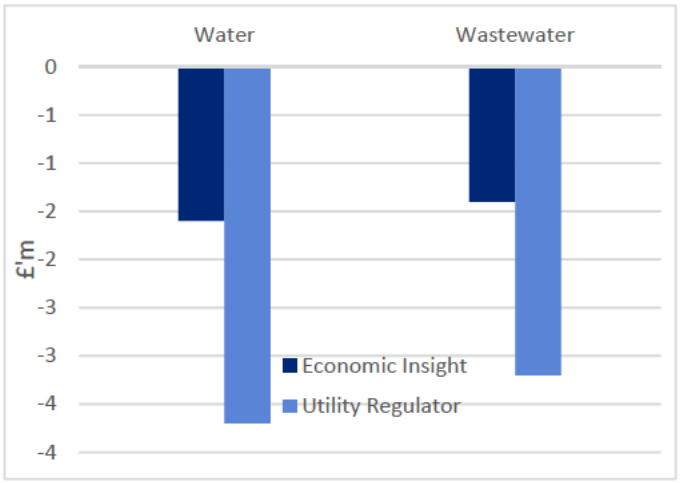


Figure 4.3: Labour related SCFs – comparison of EI and UR proposals.

4.3.8 We have also reviewed the calculation of the regional power price special factor and note CEPA has largely followed our methodology. However, when calculating average power prices in GB and NI, CEPA omitted 2013H1 (i.e. January – June 2013), and instead based annual prices in a financial year on the average of H2 of that year and H1 of the following year (i.e. July – June). In our Business Plan, we took the average of H1 and H2 in each year (i.e. January – December) to calculate prices in each financial year. We cannot see any clear rationale for this change, however we estimate it increases the average negative special factor adjustment by a further -£0.7m.

Improving wastewater efficiency.

4.3.9 The Utility Regulator has based its assessment of NI Water's relative efficiency on 5 econometric models – 3 water and 2 wastewater. The models were used to calculate the efficiency gap between NI Water and the Upper Quartile (UQ)

company in each year between 2012/13 to 2018/19 (note there was no output from the water models for 2012/13 as not all input variables were available for that year).

4.3.10 The overall efficiency gap has been calculated based on an average over the 6 or 7 year period. This approach is reasonable where there is no discernible efficiency trend observed, however where there are clear trends over the time period, then it seems logical that more weighting should be given to recent years.

4.3.11 Figure 4.4 below summarises the efficiency gap to the upper quartile for both wastewater models used by the Utility Regulator in the Draft Determination for the seven year period 2012/13-2018/19. Over the time period there are steady improvements observed in the results of both models. It is worth noting that by 2018/19 the gap has reduced to almost -1% for both models, which would suggest there is currently little or no scope to secure further savings from this area.

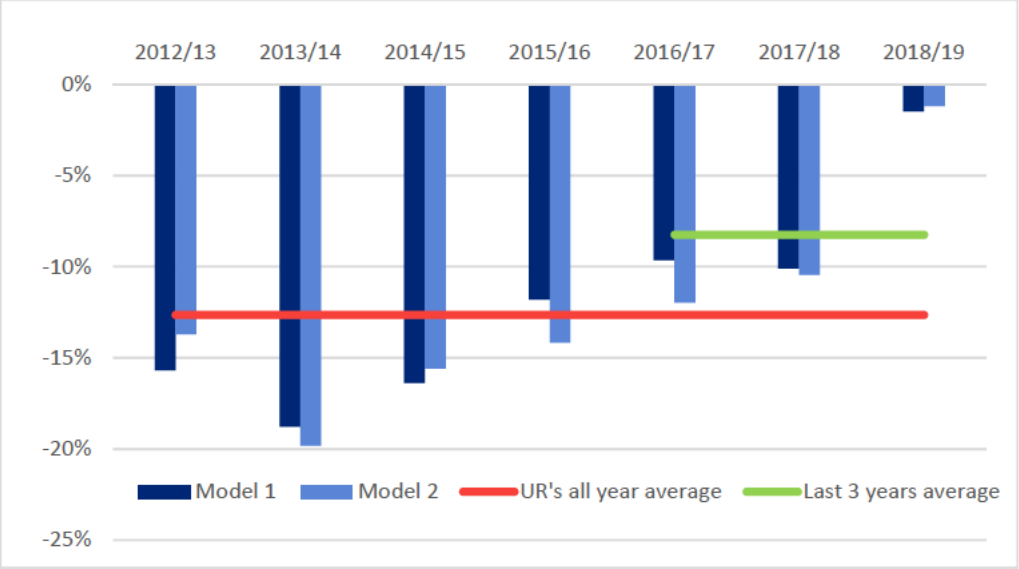


Figure 4.4: Wastewater models improved efficiency trends

4.3.12 The Utility Regulator assessment gives equal weighting to all years resulting in an average assessed efficiency gap for wastewater of -12.7%, as shown by the red line. It is worth also highlighting the advice given by CEPA in their report (PC21 Efficiency Modelling - PC21 Draft Determination Annex L). CEPA noted

that: '*there was some evidence that NI Water is becoming more efficient over time with respect to sewerage opex, which the UR may wish to consider when assessing whether NI Water's sewerage opex is efficient'.*

4.3.13 Given the clear improvements that have been made, it is important this is properly taken account of in order to ensure that any efficiency challenge derived from it is reflective of progress made. If for example only the last three years (2016/17 – 2018/19) are used to derive the average, the gap reduces to -8.3% as shown by the green line. This in turn would result in the overall efficiency gap narrowing by c2% (all other things being equal).

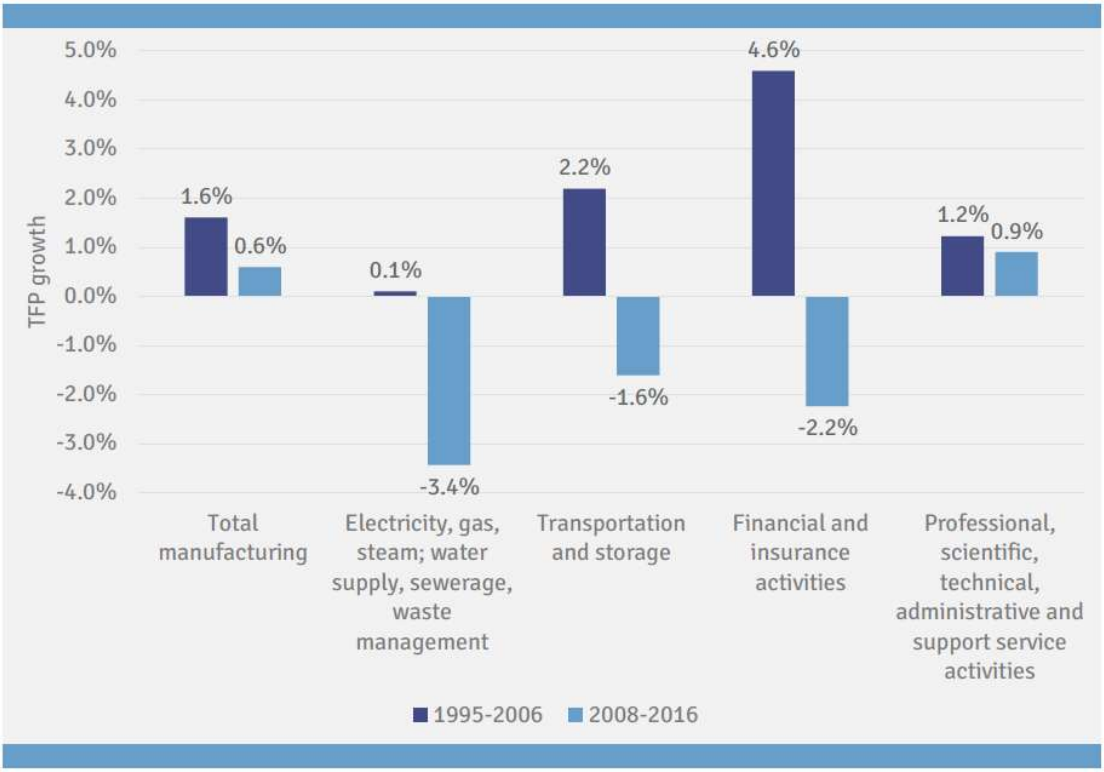
4.4 PRODUCTIVITY GROWTH CHALLENGE

4.4.1 In the Draft Determination, the Utility Regulator has proposed a significantly higher productivity growth forecast, (i.e. 0.79% per annum) than we had included in our Business Plan estimates (i.e. 0.44% per annum).

4.4.2 We asked Economic Insight to review the approach used by Utility Regulator. Their report is included in Annex 4.2.

4.4.3 In summary Economic Insight found that because the Utility Regulator's assessment was based on the 2019 EU KLEMS datasets, which cover the period 1995-2016, it included three additional years prior to the financial crisis in 2008 (i.e. 1995-1998) but only one additional year after it (i.e. 2016). In so doing, the Utility Regulator's estimates of productivity growth include 13 years before the financial crisis, compared to nine years afterwards and as a consequence, place greater weight on the higher productivity growth that occurred before the financial crisis.

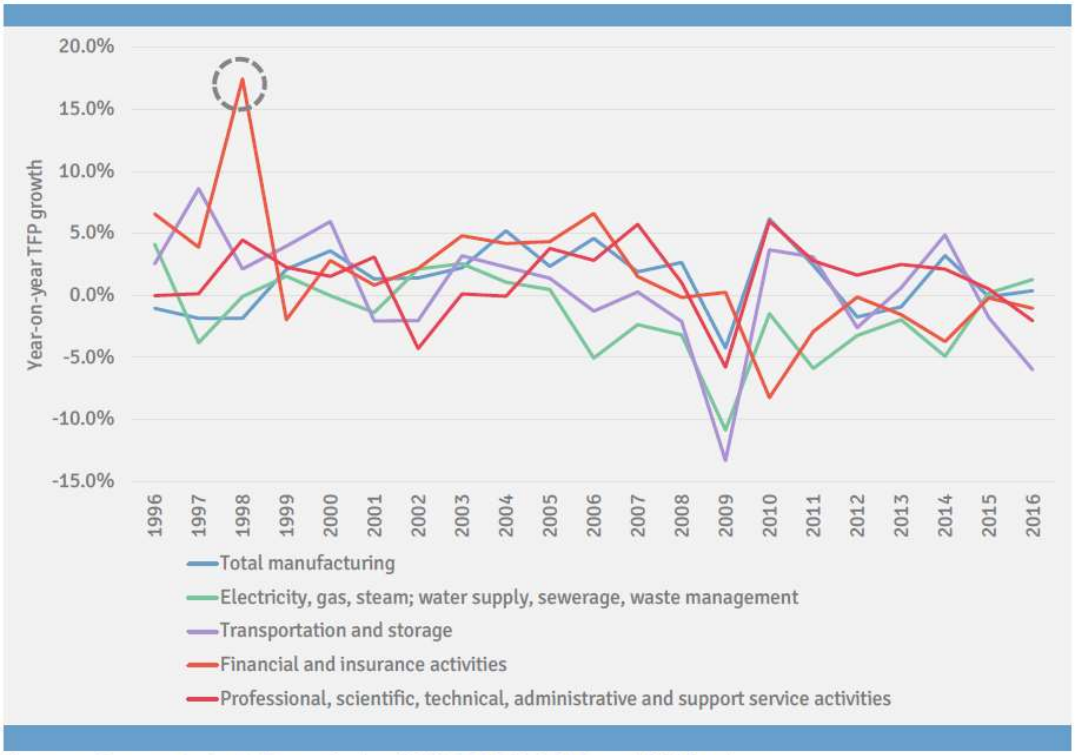
4.4.4 The importance of this point is best illustrated in Figure 4.5, which compares Total Factor Productivity (TFP) growth in 1995-2006 with growth in 2008-2016 for the sectors used in the estimation of opex productivity growth. In each of the five, productivity growth was higher in the period 1995-2006 than in 2008-2016, and in three of the five sectors, productivity growth was negative in 2008-2016.



Source: Economic Insight analysis of EU KLEMS 2019 release

Figure 4.5: Productivity growth before and after the financial crisis.

4.4.5 A further consequence of the Utility Regulator's choice of timeframe is that its higher productivity growth estimates are driven to a large extent by productivity growth in a small number of industries during the very early years of the period under consideration. This is illustrated in Figure 4.6, which shows year-on-year productivity growth for the sectors underlying the opex productivity growth estimates. This shows that the three additional years that the Utility Regulator includes at the start of the dataset (1995-1998) include one year of extremely high growth (1997 to 1998) in financial and insurance activities of 17.5%.



Source: Economic Insight analysis of EU KLEMS 2017 and 2019 releases.

Figure 4.6: Year on year productivity growth of component industries.

4.4.6 If 1999 or 1998 is used as the starting year for estimating opex productivity growth, the average rate is around 0.5%; if any of the 3 years before this are used, this rises significantly to 0.7%-0.8%. We consider it problematic that productivity growth estimates are unduly influenced by such outliers in this way.

4.4.7 In light of the above, Economic Insight recommend a more balanced approach, one that attaches equal weight to pre- and post-crisis periods. Making greatest use of available data, this implies a 19-year timeframe from 1998 to 2016, which includes nine years pre-crisis (1998 to 2006) and nine years post-crisis (2008 to 2016). By so doing this method takes account of recent evidence of subdued productivity growth, while allowing for a degree of improvement in future productivity performance towards the longer-term average.

4.4.8 Using this approach, Economic Insight estimate that a productive growth estimate of 0.52% per annum will better reflect the opportunity for NI Water to make productivity savings during PC21.

4.4.9 We acknowledge that there is uncertainty as to whether productivity growth will remain subdued or return to pre-crisis levels. On balance, we do not consider that there is a strong rationale for placing more weight on the latter possibility. At the time of writing there remains significant concerns over the impact of, and the economy's recovery from, the COVID-19 pandemic. In this context, we note that the immediate impact of the pandemic has been a sharp fall in productivity. Add to that economic uncertainty which Brexit brings. These two issues alone are likely to influence if there is any return to growth in the immediate future and therefore over the course of the PC21 price control period.

4.5 APPLICATION OF EFFICIENCY TO BUSINESS RATES

4.5.1 Despite committing to review the treatment of business rates in the PC21 Opex 'minded to' Methodology, the Utility Regulator has continued to adopt the same approach as in previous price controls by applying both frontier shift and catch up efficiency challenge to our business rates forecasts. As a result the Draft Determination implies this cost should reduce by 13%, c£4m by the end of PC21. We believe this is unfair and contrary to accepted regulatory practice.

4.5.2 NI Water is the only regulated utility whose business rates costs are treated in this manner. We have reviewed the approach taken by both Ofwat and recommended by Competition and Markets Authority (CMA) in their recent PR19 appeals provisional findings summarised in the table below:

Table 4.2: Ofwat and CMA approaches to business rates

Efficiency challenge	Ofwat	CMA
Frontier shift	Applied to costs including business rates on grounds productivity growth includes all costs.	Applied to costs including business rates on grounds productivity growth includes all costs
Catch-up efficiency	Not applied; cost allowances based on rateable values and 75:25 customer/company cost sharing mechanism	Not applied; cost allowances based on rateable values and 90:10 customer/company cost sharing mechanism

4.5.3 CMA have concluded that there is little rationale for applying a catch-up efficiency challenge to business rate and other un-modelled costs. Catch-up efficiency estimates are based on a dataset that deliberately excludes such costs. Companies' lack of control over these costs indicates that the catch-up efficiency estimates are unlikely to be reflective of the potential scope for efficiencies. As such, neither Ofwat nor the CMA apply catch-up efficiency to business rates, instead opting for allowances based on estimated actual business rate costs and including pass-through mechanisms in which customers bear 75% (Ofwat) and 90% (CMA) of costs in excess of these allowances. The CMA's view was based on a review of the treatment of business rates in other regulated sectors, which showed that Ofgem and the Office of Rail and Road included full pass-through and the CAA applied an 80% sharing rate for Heathrow.

4.5.4 Importantly, we note that the rationale for applying frontier shift to business rates (that the data used to estimate productivity growth include these types of costs) directly cuts across any rationale for applying catch-up efficiency.

4.5.5 Whilst we accept there is a case for including business rates costs when frontier shift is applied, hence our Business Plan proposals in this regard, we reject the Utility Regulator's proposal to also apply catch up.

4.6 OTHER OBSERVATIONS

Utility Regulator has not properly assessed their efficiency proposals

4.6.1 Assessing the reasonableness or achievability of proposed efficiency targets is an important element of the price control process. Setting unrealistic targets creates risk for both NI Water and its customers. In previous price controls the Utility Regulator has sought assurance that targets were reasonable in a number of ways e.g. independent research, use of alternative top down approaches. However, in the PC21 Draft Determination the Utility Regulator has assessed the reasonableness, or otherwise of their proposed targets by means of a comparison with equivalent targets in previous price controls and

by reference to an 'achievable efficiency range' recommended by LECG in January 2008[3].

4.6.2 In the Draft Determination, the Utility Regulator has concluded that 'the challenge to NI Water at PC21, although robust, remains reasonable'. This conclusion is reached by simply comparing the proposed PC21 opex efficiency target (i.e. 2.11%) with the equivalent targets in PC10 (6.48%), PC13 (4.4%) and PC15 (2.35%). We believe this is misleading. Going into PC10, PC13 and PC15 NI Water was much more inefficient than it is now and one would therefore, intuitively expect the efficiency targets in earlier Price Controls to be higher as a result.

4.6.3 Given catch up efficiency is a significant element of the overall target it seems reasonable to assume there should be a degree of correlation between the efficiency gap and the efficiency target. By calculating the 'efficiency target to gap' ratio for each price control, we normalise for the differing levels of relative efficiency which prevailed in each, allowing a more meaningful comparison to be made. The table below shows the efficiency gap and target for each Price Control and also shows the target as a proportion of the gap (i.e. target to gap ratio).

Table 4.3: PC10 / 13 / 15 / 21 comparison of efficiency targets

	Efficiency Gap	Efficiency Target	Target to Gap Ratio
PC10	49%	6.5%	0.13
PC13	38%	4.4%	0.12
PC15	22%	2.4%	0.11
PC21	8%	2.1%	0.27

4.6.4 As one might expect, while the relative efficiency gap has steadily reduced so too has the efficiency target. As a result, the efficiency target when expressed as a proportion of the gap (i.e. 'targets to gap ratio') is remarkably similar in PC10, PC13 and PC15. In PC21, we note the Utility Regulator's proposed target is only 0.3% less than in PC15 despite the efficiency gap reducing by

[3] 'Top down analysis of efficiency assumptions in the UK regulated sector – LECG 22 January 2008.

almost 60% and the target expressed as a proportion of the gap is almost three time higher than in previous price controls. On this basis the Utility Regulator's conclusion that the efficiency targets set are reasonable is misleading.

4.6.5 The Utility Regulator also draws on advice given by LECG in January 2008. At that time LECG recommended that an efficiency target in the range 5% to 7.5% would be reasonable for NI Water. However, LECG do make it clear that this range is only appropriate for a very inefficient company. Given the improvements we have made since then (the efficiency gap has reduced from 49% to c8%) this recommended range is no longer valid.

Comparison with our bottom up assessment

4.6.6 In order to ensure that the 'top down' efficiency targets contained in our PC21 Business Plan were achievable, we undertook a thorough 'bottom up' review of each main operational area of our business, following which we identified 10 transformational opportunities that could deliver efficiency savings which when combined totalled £9m. We named this review "Planning for the Future", details of which were provided in our PC21 Business Plan.

4.6.7 The Utility Regulator's proposals would require a further £11m in savings to be made over and above the Planning for the Future savings. Having carried out our review it is our opinion that such further cuts could only be achieved through cuts to services.

100% catch up is not appropriate

4.6.8 In our plan we proposed that we would close 80% of the gap to the Upper Quartile companies in E&W by the end of PC21. In the Draft Determination, the Utility Regulator has set catch up efficiency targets based on a closure of 100% of this gap by the 2nd last year of PC21. Whilst 100% closure is in line with the approach adopted by Ofwat, it represents a more aggressive approach than in previous price controls, which we believe is unreasonable and unjustified in view of differences both between NI Water and companies in England, and the way they are regulated.

4.6.9 Firstly, using 100% catch up increases the risk that allowed opex is not sufficient and that NI Water is underfunded. In this regard, NI Water's situation is not comparable with that of companies in England and Wales as NI Water does not enjoy the same degree of mitigation for cost overruns within its price control framework. Companies in England and Wales benefit from cost sharing mechanisms. Under these mechanisms, companies that overspend cost allowances can recover a proportion of this from customers and, conversely, share savings associated with cost underspends. NI Water, on the other hand, has little or no flexibility to overspend its budget in any given year. Thus the risk in our case is much greater.

4.6.10 Secondly, NI Water has also consistently maintained that the efficiency targets must reflect our unique status. Whilst benchmarking NI Water's costs to the more efficient companies does provide a sound basis from which efficiency targets can be set, those targets must reflect the reality of our governance framework and the restrictions it places on the pace at which efficiencies can be delivered.

4.6.11 As a Non Departmental Public Body (NDPB), NI Water is subject to the full suite of public sector governance and compliance measures which directly affect what we do, how we do it and the time it takes to get it done. We are subject to the annual government budgetary cycle and in-year monitoring rounds. In addition, financial management is made more complex by the need to comply with government accounting guidelines as well as regulatory and statutory accounting guidelines. The combination of these three factors reduces our agility to respond to change and removes the financial flexibility from which the English and Welsh water utilities benefit.

4.6.12 The adoption of an 80% catch up in our Business Plan in part reflects the fact that NI Water, as a NDPB, does not have access to the full suite of transformational tools available to other utilities to reduce costs. Staff related costs is one of our key cost categories, however terms and conditions are controlled by government and not by the company - it is a current political imperative that staff leaving the organisation do so on the basis of voluntarily

programmes. Neither do we have access to the range of incentives used successfully in England and Wales. Therefore the pace at which change can be made is likewise inhibited. In such circumstances 100% closure is totally unreasonable.

4.7 TREATMENT OF PPP

4.7.1 The Utility Regulator has accepted the PPP forecasts set out in our Business Plan with two exceptions:

- Performance deductions in Alpha were increased to half the historic run rate. This amounted to a reduction in funding of £0.8m over PC21.
- Expenditure classified as 'operating expenditure' was subjected to a productivity challenge. This reduces funding by £3.4m over PC21 and implies an additional efficiency challenge of £0.7m p.a. in water and £0.3m p.a. in sewerage by 2026-27.

4.7.2 We believe the Utility Regulator has misunderstood our proposals around the Alpha investment and failed to grasp the limitations in scope for further cost savings within these contracts. We set out our reasons for each of these below:

Approach to Alpha Performance Deductions

4.7.3 In our PC21 Business Plan, performance deductions passed back to customers, both quality and capacity related, were calculated as the average of the last three years (2016/17 to 2018/19). For reasons outlined in the Business Plan, we removed water quality related deductions, leaving only capacity related deductions within the unitary charge projections for PC21.

4.7.4 In order to ensure that customers were not impacted and receive the full benefit of the performance deductions, the water quality element was passed back to customers through the Alpha investment return which was netted off the overall revenue requirement (see table in Annex 7.1 table 7.1.12).

4.7.5 In the Draft Determination, the Utility Regulator calculated the performance deduction forecast based on 50% of total performance deductions i.e. water quality and capacity, over the last 4 years and included the full amount as a

credit within unitary charges. This could be viewed as a reasonable approach however, the water quality related performance deductions which we had transferred to the Alpha investment return were retained. This has amounted to double counting of performance deductions.

Scope for Alpha Efficiencies

4.7.6 Prior to the acquisition of the Alpha contract by NI Water, it was in the best interests of both NI Water and its customers to ensure the unitary payment was as low as possible. Over the period 2010 – 2016 seven different changes to the Alpha contract were initiated. These changes reduced NI Water's costs by a collective £6.7m or 3.6% / circa. £0.7m p.a. to date. Each of these changes reduced the level of service being provided and resulted in a saving to the contractor and a lower cost to NI Water via the gain share mechanism. By 2015, the parties were unable to identify any further reductions in service for which the financial reward would outweigh the risk of removing the service.

4.7.7 Following our acquisition of the Alpha companies, we proposed that all investment returns were to be passed back to customers. In order to save money for customers, our focus has therefore shifted away from the unitary payment, which has effectively become an intercompany charge, and onto changes which maximise group profitability without affecting lenders risk.

4.7.8 With this in mind, NI Water PPP and DWL / NI Water Alpha Ltd (NIWAL) management teams have initiated or trialled a number of projects including electricity generation, variation of water quality standards, and the sharing of insurance risks. These savings will either reduce NI Water's or the group companies' operating costs but will not impact the unitary charge.

4.7.9 In the Draft Determination, the Utility Regulator applied a productivity challenge of c.0.7% per annum to the 'operating cost' element of the unitary payment resulting in a reduction of £2.3m over the PC21 period. We disagree with the Utility Regulator's proposals for the following reasons:

- The unitary payment is contractually determined and the only way in which reductions can be made is through agreed service reductions.

There is little scope for any further such reductions without adversely impacting lender risk;

- For the reasons outlined above, applying an efficiency challenge to the unitary payment in the manner proposed, reduces the Alpha company profitability and therefore the amount of benefits that will get passed back to customers. Within the Draft Determination, the correlation between the unitary charge and the benefits we are passing back to customers has been ignored or misunderstood with reductions to the unitary payment proposed without any corresponding reduction to the benefits we proposed to pass back to customers;
- The split of costs used by the Utility Regulator to calculate the efficiency challenge is notional and bears no correlation to actual costs. PC21 Business Plan table 2.2 shows £14.5m of pre efficiency operating costs, however in reality, a large element of the unitary charge relates to a 'fixed' capacity charge and only £5.2m is variable in nature;
- The Utility Regulator has incorrectly assumed that the gain share mechanism only applies to sewerage services. The gain-share mechanisms apply to both the Alpha and Omega contracts.

Scope for Omega Efficiencies

4.7.10 The focus of managing the Omega contract for the past 13 years has been to avoid the risk of increased costs over and above the contracted service payment targets. The risk of such cost increases has been significantly high, with Glen Water seeking to claim substantial costs over and above contracted service charges at various times over the same period. The extent of litigation (4 Adjudications and 1 High Court Case) was such that the relationship could not have produced changes to reduce service tariffs.

4.7.11 In addition, unlike the Alpha contract, the Omega services were contracted at no higher than regulatory standards, and therefore, irrespective of relationships, there was little opportunity for reducing the level of service with a commensurate shared reduction in contract charges.

4.7.12 Despite these twin challenges, three cost saving changes were introduced over 2011-2014, reducing NI Water's costs by £1.4m or 0.65% / circa. £0.2m p.a. to date. No further cost reductions have been identified since. For this reason NI Water could not, and did not commit to reducing Omega costs in PC15 or PC21.

4.7.13 As PC21 approaches, it is expected that a settlement agreement will be executed between the parties. As a result of the settlement, there will only be a marginal impact on unitary charge including a reduction of c.£40k p.a. in respect of savings at Ballynacor, and an increase of c.£50k p.a. due to removal of a credit we currently receive in respect of a North Down UV change.

4.7.14 It is envisaged that following successful delivery of the assets and the start of electricity related benefits flowing, the opportunity to further reduce the level of service in return for an even lower level of charges from Glen Water is now effectively removed. Any opportunities there may have been to reduce the level of service (and hence reduce contract tariffs) have already been incorporated into the settlement agreement and associated contract amendments.

Alpha Capacity Charge

4.7.15 Following a recent exercise by DWL, capacity charges have been remodelled in line with the contract. This has resulted in a £9.5m increase to projected revenue for the PC21 period from our Business Plan projections. This increase in capacity charge will increase the profitability of DWL and profits will eventually be distributed back to NI Water via dividends later in the contract.

4.7.16 Given this does not increase the cost to the NI Water group, we do not see the need for this to impact customer charges. For monitoring purposes, we would request that capacity charges are increased within the Final Determination, with a corresponding increase to the benefits returned to customers.

Indexation of PPP contracts.

4.7.17 Both the Alpha and Omega unitary charges contain a significant element of costs which are not subject to RPIX indexation. In our Business Plan, this was taken into account within the nominal projections, which were largely sourced

directly from the payment mechanisms within each contract. When converting the nominal projections to 2018/19 prices for PC21 Tables 2.2 and 2.3, full indexation was used, meaning that costs actually fall when stated in 2018/19 prices. We note that since our Business Plan submission, forecasts for inflation have materially fallen and we have requested that this is reflected in the Final Determination. If this is the case, we would request the opportunity to revise the nominal PPP projections to take account of this. Simply applying a revised inflation assumption to our Table 2.2 and 2.3 projections may materially understate the required funding.

4.8 ANNEXES

Annexes related to this chapter are as follows:

- Annex 4.1 – Labour Related SCF (Economic Insight)
- Annex 4.2 – Frontier Shift at PC21 (Economic Insight)

5 CAPITAL INVESTMENT AND EFFICIENCY

SUMMARY

This chapter deals with the Utility Regulator's proposals in relation to the Capital Investment Programme for PC21. NI Water acknowledges that the Utility Regulator has, in the main, agreed with and accepted our proposals for capital investment and the need for a step change in the level of investment. We also welcome the Utility Regulator's acceptance that the determination of some projects should be deferred until sufficient information is available to allow a confident determination.

There are a number of areas where we have challenged the Draft Determination findings including the application of a Generic Reporter Adjustment; the reasoning for disallowing funding for some projects and the quantum of the allowance for Consequential Capital Maintenance. We have provided clarifications or additional information and we ask the Utility Regulator to reconsider its conclusions on these aspects.

5.1 INTRODUCTION

General

5.1.1 NI Water welcomes that the Utility Regulator has, in the main, agreed and accepted our proposals for capital investment and the need for a step change in the level of investment to address the issues recognised by all of our stakeholders with the lack of capacity in the sewerage network and wastewater treatment works which is a cause of development constraints.

5.1.2 We also welcome the Utility Regulator's acceptance / recognition that high levels of investment to address capacity issues in the sewerage networks and wastewater treatment works will be required in at least two subsequent price controls.

5.1.3 We note that investment in the Living with Water Programme (LWWP) in PC21 has been funded through tariffs whilst maintaining stable price limits. We are content with this proposal.

5.1.4 The Utility Regulator has indicated that it may be necessary to make a case for grant funding to off-set part of the LWWP capital programme in the future. We concur with this conclusion.

Capital Investment Draft Determination – Our Response

5.1.5 Section 6 of the Utility Regulator's Draft Determination Annex I includes a commentary on each of the sub-programmes. This commentary includes the rationale for the Draft Determination for each sub-programme together with questions and requests for further information.

5.1.6 NI Water has reviewed the rationale provided on a sub-programme by sub-programme basis and identified the main areas which we believe need to be considered further in the Final Determination and the associated rationale in Annex 5.1.

5.1.7 Annex 5.1 is a spreadsheet which links our responses to each of the issues and queries raised by the Draft Determination. Where NI Water's response is short, text has been provided in the spreadsheet. Where the response is too large to be inserted into a spreadsheet cell it has been provided in a separate Annex document. A list of the Capital Investment and Efficiency Chapter Annexes is provided at the end of this chapter.

5.2 ASSESSMENT OF THE CAPITAL INVESTMENT PROGRAMME

Utility Regulator's Capital Investment Challenge

5.2.1 NI Water has developed and implemented a new structured Investment Planning and Costing (IPAC) tool to allow consistent costing of PC21 capital projects across the majority of sub-programmes. Details of the IPAC tool were included in Appendix 6.26 of our PC21 Business Plan. This tool is not only used to price the PC21 submission, but also in 'business as usual' including benchmarking as part of our drive on efficiency.

5.2.2 In the Draft Determination, the Utility Regulator has focused on challenging estimated costs to ensure that they are reflective of current costs. Based on the work of the Reporter and the Utility Regulator's own challenge of historical cost rates, the Utility Regulator has identified a reduction in estimated capital expenditure of 11.9% compared to our post efficiency proposals in our PC21 Business Plan submission.

5.2.3 A summary of the main deductions to our capital plan made by the Utility Regulator in the Draft Determination is presented in Table 5.1.

Table 5.1: Utility Regulator Deductions to PC21 Business Plan

Deduction Description	Approximate Deduction
Generic Reporter Adjustment	£94m
Disallowed Elements	£101.6m
PC15 Outturn Cost Adjustments	£40.5m
Other Deductions	£4.8m
Total	**£241m**

5.2.4 A detailed breakdown of each of the above categories on a project by project basis is provided in Annex 5.2. This Annex facilitates tracking of project costs through the PC21 Business Plan, Draft Determination, NI Water Response to the Draft Determination and ultimately to the Final Determination.

5.2.5 The Generic Reporter Adjustment (GRA) equates to a 6.7% reduction in pre-efficiency costs on selected projects which results in a net deduction of £94m (18/19 prices) compared to the PC21 Business Plan. NI Water's response to the Reporter's Generic Adjustment challenge is included in the Capital Efficiency Section of this report consistent with the approach used in the Draft Determination and in Annex 5.3.

5.2.6 The GRA was based on the Reporter's assumption that the Tender Outturn Ratio risk used in our costing system effectively double counts the coverage of risk and that there is insufficient justification for including it. We do not accept this assumption.

5.2.7 The Disallowed Elements relate to projects which the Utility Regulator has removed in their entirety or reduced the scope for the PC21 period.

5.2.8 PC15 Outturn Cost adjustments relate to the projects where the Utility Regulator has used PC15 outturn costs to determine the amount to be funded in PC21 for similar projects.

5.2.9 Other Deductions refers to amendments to the PC21 Business Plan initiated by NI Water or the Utility Regulator after submission of our Business Plan.

Main NI Water Challenges to the Capital Investment Draft Determination

Disallowed Elements Deductions

5.2.10 Other than the Generic Reporter Adjustment which is discussed under the Capital Efficiency section below, the main area of challenge are the Disallowed Elements adjustments.

5.2.11 The main elements of this are summarised in Table 5.2 which includes an overview of our rationale for challenge.

5.2.12 The detail and rationale for all projects is included in Annex 5.2. Reference should also be made to the Annexes for particular projects indicated in Table 5.2.

Table 5.2: Main Areas of NI Water Challenge on DD Disallowed Elements by Sub-Programme

Sub Prog	Projects Group	DD Disallowed Adjustment (excl GRA)	NI Water Proposed Adjustment	NIW Rationale	Annex
0	Capitalised salaries and on-costs	-£19,660,000	£-	Additional evidence based on post PC21 Business Plan detailed 'LEAN' resource planning provided to support increased staff levels.	5.4
2	WwTW Base Maintenance	-£33,010,000	£-	Evidenced Development Output Plan for Reformed Wastewater Compliance Capex provided with higher % enhancement. NIEA Support confirmed.	5.5
4	NIW Alpha WTWs Treatability Improvements	-£7,411,000	£-	PPP Contractual provisions paper presented to challenge the UR Due Diligence assumptions.	5.6
5	Northern WRZ Resilience	-£2,500,000	-£1,089,000	Original £2.5m budget included an allowance of £1.089m for Phase 4 costs in error.	5.1
19	PftF - Smart Metering	-£6,973,000	[redacted]	NI Water updated SMART Metering Strategy and Business Case includes a cost benefit analysis for the full range of options which supports meter replacement before end of life.	5.7
20	20c. Fleet	-£1,574,000	£-	Changes in government policy with ban on the sale of petrol and diesel vehicles from 2030. NI Water plan to introduce AFVs progressively [2024/25 – 25% of new vehicles; 2025/26 – 50% of new vehicles; 2026/27 – 100% of new vehicles]	5.1
20	20c. CPMR Re-platform	-£1,401,000	£-	Updated Business Case provided to support CPMR re-platform which is a key building block for the efficient delivery of our Capital Programme. This will facilitate system development and interconnectivity of corporate systems and enable accurate performance monitoring and change management to minimise disruption and maximise outcomes	5.8
20	20f. IOC	-£3,929,000	-£3,929,000	DD Accepted pending review of updated Business Case. NI Water's strategic plan for future working models and accommodation facilities is under development.	5.9

Sub Prog	Projects Group	DD Disallowed Adjustment (excl GRA)	NI Water Proposed Adjustment	NIW Rationale	Annex
20	20f. Energy Efficiency	-£6,578,000	£-	Updated information and new Business Cases provided to support the blower, generator and pump station upgrades. Payback periods of circa 7 years	5.10
20	20f. EV Charging	-£1,801,000	£-	Additional supporting information provided. Charging infrastructure must be rolled out ahead of vehicle upgrades to enable the transition. Part of our carbon commitment and road to zero carbon.	5.9
20	20f. IOC (Living With Water Programme)*	-£4,001,094	-£4,001,094	DD Accepted pending review of updated Business Case.	5.1
23	Water Public Realm	-£6,761,000	-£6,561,373	Deduction accepted except £200k for Public Realm Water.	5.11
24	Sewerage Public Realm	-£4,808,000	£-	Additional evidence provided to support reinstatement of funding.	5.11

Planning for the Future Deductions

5.2.13 It can be seen from Table 5.2 that a significant proportion of the proposed deduction is associated with the 'Planning for the Future' (PftF) programme in SP20 Management and General. We believe that the PftF programme of work is essential as an enabler to allow us to continue our transformational journey to achieve our proposed efficiencies. As noted in Table 5.2, the Draft Determination disallows key elements of PftF in relation to energy efficiency, electric vehicle charging as well as smart metering.

5.2.14 A further key element of the 'Planning for the Future' investment was our Intelligent Operations Centre (IOC) enabling us to be smarter at using our vast amount of data and working in a more joined up way to predict and prevent asset failures. As the Draft Determination suggests, we are reviewing our plans in light of COVID-19 impact on ways of working and will update the Business Case accordingly.

5.2.15 We have reviewed and provided further evidence to support these projects as part of our Draft Determination response. Our additional supporting information for Smart Metering is included in Annex 5.7, IOC and Electric Vehicle Charging

in Annex 5.9 and Energy Efficiency in Annex 5.10. Note that the revised Smart Metering costs present the full costs from the new business case.

5.2.16 We are keen to engage with the Utility Regulator on these PftF projects prior to the Final Determination.

PC15 Outturn Cost Adjustments

5.2.17 The PC15 Outturn Cost Adjustments relate to projects where the Utility Regulator has used PC15 outturn costs to determine the amount to be funded in PC21 for similar projects. We note that the Utility Regulator has included deductions to our cost estimates of £48.7m and additions of £8.2m. The main adjustments to the PC21 Business Plan are summarised in Table 5.3 as well as an overview of our rationale for challenge.

Table 5.3: Main NI Water Challenges on PC15 Outturn Costs Adjustments

Sub Prog	Projects Group	PC15 Rate Adjustment by UR	NI Water Proposed Adjustment	NI Water Rationale	Annex
3	Controlled Reservoir Maintenance & Inspections	£92,000	£-	Additional Inspections required outside 10yr cycle due to remedial works not being completed within the recommended timescales.	5.12
7	SR Rehab Programme	-£4,285,000	-£1,513,192	Only 51 sites addressed in PC15 due to funding constraints. 208 planned for PC21. Improved methodology and 87% increase in investment for PC21 delivers >4 times the number of sites.	5.13
8	Water mains rehabilitation	-£8,155,000	£3,983,788	NI Water propose length of Water Mains rehabilitated (excl 92km Leakage Pilot) be similar to PC15 (771km) which exceeds DD Length.	5.1
10	New Connections	-£3,239,000	£796,644	Challenging UR's DD due to implementation of new contract (Oct 19) with higher outturn rates.	5.14
17	Rural WwTW Programme	-£4,090,000	-£3,693,601	Additional evidence to support contention that approximately 75% of sites require land as opposed to the 60% assumed by the UR.	5.15

Sub Prog	Projects Group	PC15 Rate Adjustment by UR	NI Water Proposed Adjustment	NI Water Rationale	Annex
18	DSCT and Sewer Adoption	£144,000	£1,307,591	Based on response to UR prior to the DD as part of the query process.	5.1
20	20c. Asset Management Plan (NIAMP6)	-£853,000	£737,818	Projected PC15 outturn for NIAMP5 has increased. Higher Mid- Term Review costs likely.	5.1
20	20c. Automatic Sampling Machines	-£197,000	£-	Trade Effluent (TE) team need the automatic samplers for efficient testing, UKAS accreditation and optimising route planning.	5.1
20	20c. Capital Programme Management & Reporting (CPMR)	-£193,000	£-	IT systems must have agility to transform the digital environment in which our Data is stored and reported upon (incl P6 and Risk dashboards).	5.1
20	20c. Deterioration Risk & Reliability Model (DRRM)	-£409,000	£-	Outturn cost for Phase 1 is estimated at £1.33m. Ongoing annual licensing costs also incurred.	5.1
20	20c. Cyber Resilience	-£541,000	£-	Full Business case is limited circulation for security reasons. Project is a response to new legislation and is new and exogenous.	5.1
23	Proactive Lead pipe replacement	-£3,130,000	-£2,496,833	Accepting UR's DD based on PC15 costs but with the addition of PM overheads @12.4%.	5.1
Various	Uncontested Totals	-£15,639,000	-£15,639,000	Deductions and Additions	

5.2.18 The Other Deductions costs mostly relate to amendments to the PC21 Business Plan initiated by NI Water or the Utility Regulator after submission of our Business Plan. We welcome the inclusion of the additional £5.1m for Leakage which we identified as an amendment after cost system lockdown in our PC21 Business Plan. Other deductions mainly comprise adjustments agreed during the post Business Plan query process relating to Base Maintenance (Water), Trunk Mains and Metering sub-programmes.

5.2.19 Our Draft Determination Response does include proposed amendments to some information relating to numbers of meters which have resulted in us

proposing amended determination costs. These amendments are included in Annex 5.16.

Summary of NI Water Capital Investment Challenges

5.2.20 A summary of the costs associated with the NI Water challenges to the Draft Determination deductions is included in Table 5.4. Note that the totals include the proposed adjustments to all projects not just the projects presented in Tables 5.2 and 5.3.

Table 5.4 Summary of NI Water Challenges to DD Deductions

Deduction Description	DD Approximate Deduction	NI Water Proposed Deduction
Generic Reporter Adjustment	£94m	£0m
Disallowed Elements	£101.6m	£4.95m
PC15 Outturn Adjustments	£40.5m	£16.52m
Other Deductions	£4.81m	£5.13m
Total	**£241m**	**£26.6m**

5.3 CAPITAL EFFICIENCY

NI Water Capital Efficiency Model

5.3.1 We are pleased the Utility Regulator has accepted our proposals for capital efficiency (rising from 1.8% in 2021-22 to 10.1% in 2026-27) and that these proposals have been recognised as good industry practice.

5.3.2 The scope certainty exercise we are proposing for SP12 and SP16 is described in detail in Annex 5.17. This exercise is intrinsically linked to the opportunities for capital efficiency project by project. With further investigation, analysis and design, the scope of projects generally becomes more certain. However, the opportunity for efficiencies becomes less as we naturally move to the right and downwards on the typical efficiency opportunity curve towards construction. It is possible that in some cases capital investment requirements may rise from those currently projected even after efficiency deductions have been applied. Capital efficiencies gained project by project in these sub-programmes will be

explained on a case by case basis as part of our periodic regulatory update submissions for this development output.

Reporter Capex Challenge (Generic Reporter Adjustment)

5.3.3 The Utility Regulator has reduced NI Water's estimated costs for a significant proportion of PC21 projects by a 'Generic Reporter Adjustment' (GRA) equivalent to a 6.7% reduction to pre-efficiency costs which equates to a net deduction of £94m (18/19 prices).

5.3.4 The GRA has been applied to projects where the costs were developed using NI Water's Investment Planning and Costing (IPAC) tool and also to projects where the costs have been derived from first principles using a bottom up approach. The Utility Regulator has not applied GRA to capitalised salaries and on-costs or to items of work which have been determined using historical run-rates and unit rates because the historical costs already account for scope risk and tender to out-turn risk.

5.3.5 The GRA is founded on the conclusion reached by the Reporter that the Tender Outturn Ratio (TOR) effectively double counts the coverage of risk in our PC21 Capex costing. In their Capex Balance Sheet, the Reporter derived a range of low and high potential adjustments which was dominated by the removal of the TOR (£228m).

5.3.6 The Reporter recommended that the Tender Outturn Ratio risk component should be removed in its entirety. In the Draft Determination, the Utility Regulator has calculated the GRA based on 60% of the potential adjustments identified by the Reporter.

NI Water Generic Reporter Adjustment Challenge

5.3.7 NI Water believes that the logic used to derive the GRA is not based on evidence and as such is not appropriate. NI Water further believes that the GRA is not appropriate as it results in cost estimates which do not represent realistic costs for delivery of the outputs and outcomes required during the PC21 period.

5.3.8 Our rationale for challenging the application of the GRA is presented in detail in Annex 5.3.

5.3.9 NI Water is confident that the logic used to cost projects in IPAC is correct and based on evidence from delivering projects in Northern Ireland in PC13 and PC15.

5.3.10 NI Water's approach to cost estimation for PC21 projects is summarised in Figure 5.1.

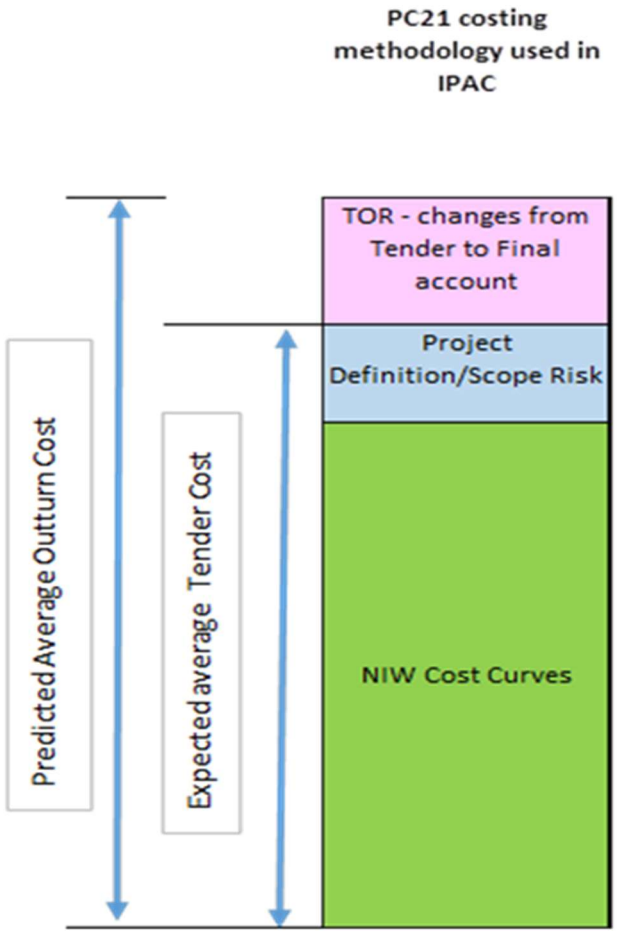
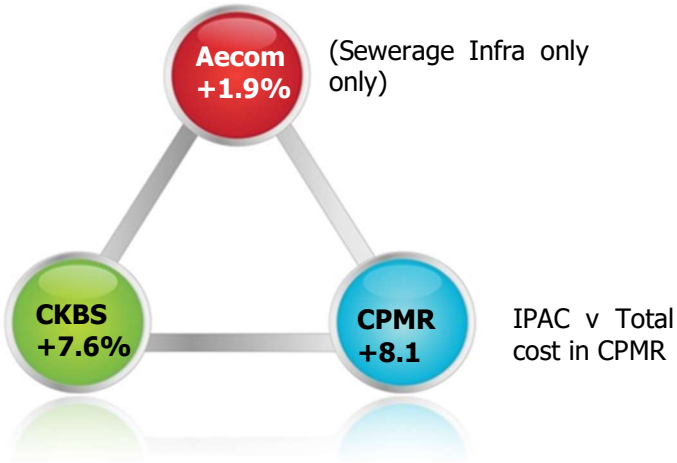


Figure 5.1: NI Water approach to Cost Estimation using IPAC

5.3.11 The logic used in IPAC requires the application of both Scope Risk and Tender Outturn Ratio risk to generate realistic costs for project delivery. We have proved this through benchmarking the costs generated against internal and external information. This benchmarking demonstrated that cost estimates generated through IPAC compare favourably with historic NI Water and wider industry costs. NI Water's costs across the overall capital programme were

found to be more than 7% lower than the benchmark costs and therefore application of the GRA is unwarranted.

5.3.12 A summary of the results of the benchmarking is presented in Figure 5.2.



Aecom 1.9% higher than NIW SI Cost Curves; Chandler KBS 7.6% higher than NIW PC21 project budgets; CPMR Actuals – 8.1% higher than IPAC generated budgets; Reporter Comparator – 28% higher than NIW cost curves

Figure 5.2 Summary of Benchmarking compared to IPAC costs.

5.3.13 NI Water believes that the GRA deduction should be removed for the following reasons:-

- The Scope Risk and Tender to Outturn Risk elements in our costing system are not double counted and follow a logical evidence based approach;
- Four sources of benchmarking data support our approach and do not substantiate an adjustment; and
- The principles used to determine the logic and the quantum of the GRA are not evidence based.

5.4 CAPITAL MAINTENANCE INVESTMENT

Utility Regulator Approach

5.4.1 The Draft Determination sets out that the Utility Regulator has reviewed recent trends in capital maintenance investment and concluded that investment from 2007-08 averaged £96.7m per annum in 2018-19 prices and that serviceability

has been maintained at this level of capital maintenance investment. To assess Capital Maintenance in the PC21 Draft Determination, the Utility Regulator:

- Established NI Water's current capital maintenance expenditure at £96.5M per annum;
- Completed an econometric assessment of capital maintenance investment in comparator companies to yield an Upper Quartile econometric estimate of £91.4m per annum;
- Determined an average expenditure over PC21 of £94.4m per annum to account for closing 80% of the gap to the Upper Quartile econometric estimate;
- Applied an efficiency and growth adjustment over the PC21 period equivalent to 1.2% (net of frontier shift);
- Added a Consequential Capital Maintenance (CCM) allowance of £18.3m per annum; and
- Concluded that a reasonable allowance for capital maintenance investment in 2018-19 prices in PC21 is £113.9m per annum.

Purpose and Service Allocation Amendments

5.4.2 The Utility Regulator has included amendments to the purpose and service allocation of a number of projects in the Draft Determination. These amendments are summarised in Annex 5.18 along with NI Water's commentary on the proposed amendments. NI Water has accepted the Utility Regulator's proposed purpose and allocation amendments except for a small number of projects. Explanations for the small number of Draft Determination allocations which we do not agree with are provided in the Annex.

Consequential Capital Maintenance

5.4.3 NI Water welcomes the Utility Regulator's acknowledgement that the step change in the capital investment programme requires a quantity of 'consequential' capital maintenance to prevent investment in maintenance which is driven by enhancement expenditure distracting from general maintenance of other assets driven by need.

5.4.4 We understand the rationale used by the Utility Regulator to determine the quantum of consequential capital maintenance. This relates directly to the material increase in the capital programme for PC21 and those sub-programmes of work with a major increase in capital maintenance expenditure since PC15, particularly those with increased enhancement activities.

Consequential Capital Maintenance Challenges

5.4.5 NI Water has reviewed the allowance in the Draft Determination from a top-down comparison with UK water companies and a bottom-up assessment by project and sub-programme. Our analysis is presented in Annex 5.19 and summarised below.

5.4.6 In the Draft Determination, the Utility Regulator has included an allowance of £683m (an average of £114m per annum) for capital maintenance in PC21. £18.3m of this £114m per annum is associated with a consequential capital maintenance (CCM) allowance to reflect the overall increase in total capital investment in PC21 including the Living with Water Programme (LWWP).

5.4.7 We have noted that an amendment is necessary in the PC15 costs in the Draft Determination Annex I Table 5.4 for SP05. The CCM allowance in the Draft Determination when amendments are made is £115.0m as opposed to the £117.8m per annum included in the Draft Determination prior to the Utility Regulator's application of the generic reporter (GRA) factor.

5.4.8 Considering the top-down approach, Figure 4 of Annex I in the Draft Determination (included below as Figure 5.3) shows a comparison between Annual Capital Maintenance and Annual Enhancement Capex for NI Water and UK WASCs.

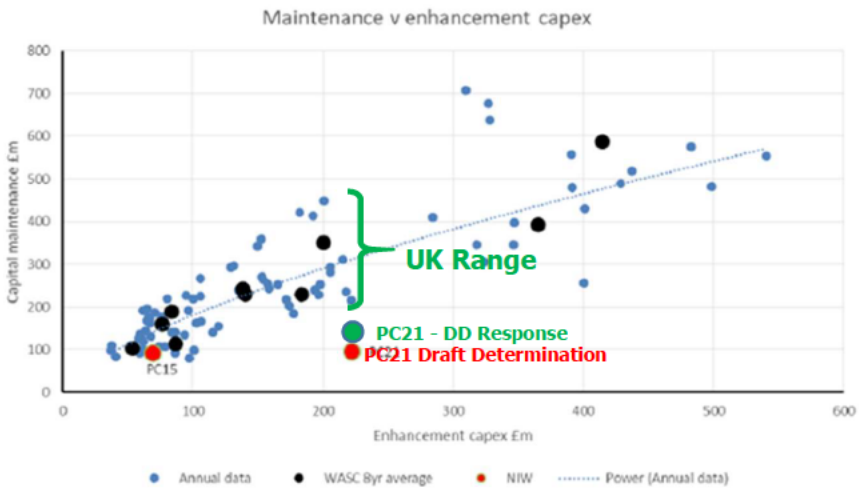


Figure 4: Maintenance capex of England & Wales WASCs relative to enhancement expenditure.

Figure 5.3 PC21 Draft Determination Annex I Figure 4

5.4.9 NI Water notes that the nearest UK comparator company in any single year has a capital maintenance of more than £100m in excess of NI Water for a comparatively sized enhancement programme (to NI Water's PC21 programme). The average comparator (best fit dotted line) indicates a c£200m/year allocation of capital maintenance above the current Draft Determination allowance.

5.4.10 NI Water anticipates that the level of investment in the PC21 enhancement programme is likely to be mirrored going forward to PC27 and PC33.

5.4.11 We therefore surmise that our rationale for the inclusion for an additional £64m (£174m minus £110m) allocation of CCM above levels determined in the Draft Determination is still econometrically well below other UK WASCs with similar sized enhancement programmes.

5.4.12 Our bottom-up assessment has considered the rationale used by the Utility Regulator to derive the CCM allowance and proposes that the Utility Regulator considers increases in CCM allowances against specific sub-programmes in the PC21 Final Determination. The proposed increases are presented in Table 5.5. The rationale for each proposed change is documented in Annex 5.19. Note that the values in Table 5.5 are calculated in the same manner as that

used by the Utility Regulator in the Draft Determination. We understand that these may be subject to change due to final determination on projects and other adjustments.

Table 5.5 DD Allowances for Consequential Capital Maintenance and Proposed Adjustments

SP ID.	Sub-Programme Name	BASE Capital Investment All figures are Post Efficiency, 18/19				
		Increase (£m)	Increase Allowed for CCM (%)	CCM Allowed (£m)	Increase Requested for CCM (%)	CCM Requested (£m)
00	Capitalized salaries and on-costs	13.0	60	7.8	100	13.0
00	Capitalized salaries (LWWP)	0.2	60	0.1	100	0.2
01	Capital maintenance (water)	29.0	50	14.5	50	14.5
02	Capital maintenance (sewerage)	34.1	0	0.0	51*	17.5*
05	Water trunk mains	4.8	100	4.8	100	4.8
12	Sewerage programme	5.9	100	5.9	100	5.9
12	Sewerage programme (LWWP)	16.9	100	16.9	100	16.9
16	Wastewater treatment	18.4	100	18.4	100	18.4
16	Wastewater treatment (LWWP)	46.5	100	46.5	100	46.5
20	Management & General	33.2	0	0.0	100	33.2
20	Management & General (LWWP)	2.8	0	0.0	100	2.8
All	**Sub-programme total**	**204.8**	**56**	**115.0**		**173.7**
All	**Average Annual CCM Allocation**					**28.9**

* Allowance for proposals relating to Wastewater Regulation Reform Capex and wastewater pumping stations

5.4.13 Note that Table 5.5 excludes any adjustment for GRA as this has been challenged in its entirety by NI Water.

5.4.14 For SP00 Capitalised Salaries and Overheads, the Utility Regulator has allowed 60% of the difference in Capital Maintenance between PC15 and PC21 as Consequential Capital Maintenance on the basis of adjustment to staffing levels from 99 to 60. We propose in Annex 5.4 of our response that the original proposed 99 staff be reinstated in the Final Determination. Subject to this proposal being accepted by the Utility Regulator we would anticipate that the full increase in Capital Maintenance for SP00 be allowed as Consequential Capital Maintenance.

5.4.15 The Utility Regulator has allowed 50% of the difference in Capital Maintenance between PC15 and PC21 as Consequential Capital Maintenance for SP01 Capital Maintenance (Water) which NI Water welcomes especially given the age profile of our WTWs. We also welcome the use of the DRRM modelling in this regard.

5.4.16 The Utility Regulator has not allowed any Consequential Capital Maintenance based on the difference in Capital Maintenance between PC15 and PC21 for SP02 Capital Maintenance (Sewerage) on the basis that the difference is mostly accounted for by the deduction of £33m for Mature Compliance Capex / Reforming Wastewater Compliance Capex in the DD.

5.4.17 We have made the case for reinstatement of Reforming Wastewater Compliance Capex project in Annex 5.5. On the basis that this is acceptable to the Utility Regulator, we would anticipate that an increase in the Consequential Capital Maintenance allowance for SP02 would be applicable. We propose that this increase should comprise the base component of the Reforming Wastewater Compliance Capex project plus 50% of the increase in WwPS capital maintenance expenditure (c£3m). We believe that our WwPS assets are under the same pressure as WTW and WPS assets and that the principle applied for SP01 should also apply for these assets.

5.4.18 NI Water's PC21 Business Plan included a stepped increase of 122% in SP20 Management and General (M&G) expenditure from PC15 (from £75.4m to £167.7m) with an associated increase of £33.2m (56%) in capital maintenance (from £59.6m to £92.8m). The Utility Regulator has not allowed any CCM for SP20 on the basis that the capital maintenance activities included in our Business Plan are to maintain existing assets and facilities, something which is common to the comparator companies used in the econometric benchmarking.

5.4.19 NI Water's proposed PC21 expenditure on SP20 M&G is relatively large in a NI Water Price Control context. We believe that our PC21 M&G programme contains a number of enhancement type and atypical projects for which CCM allowances should be considered in the Final Determination.

5.4.20 We accept that some of the capital maintenance activities included in SP20 are to maintain our existing assets and facilities. However this is not the case for a range of large projects such as those which:-

- Are not typical for other WASCs in that the proposed investment is for new systems and facilities (e.g. Planning for the Future; Intelligent Operations Centre; Analytical Services Refresh etc.);
- Represent catch-up investment due to historic funding shortages (e.g. Health & Safety; Model Library updates to support our wastewater investment); and
- Address responsibilities that other WASCs do not generally hold (e.g. Historic Estate).

5.4.21 The aggregated base allocation for these projects is included in Annex 5.19 and equates to £52.1m. We propose that the CCM for these projects should be increased to £36m in line with the threshold indicated in the proposed DD methodology.

5.4.22 We request that the Utility Regulator reviews the allowance for consequential capital maintenance in line with the rationale above and the evidence provided in Annex 5.19.

Mature Compliance / Reforming Wastewater Compliance Capex

5.4.23 The Draft Determination disallows £33m in SP02 Base Maintenance (Sewerage) for Mature Compliance / Reforming Wastewater Compliance Capex based on the Reporter's recommendation. The premise for this was that 'the estimate is high-level and lacking in clear rationale to explain and justify the cost, risk and base maintenance allocation assumptions'. The Utility Regulator has also stated that 'we are prepared to consider this further if the company can provide a well-founded plan which clearly demonstrates that the investment will secure compliance in the longer term'.

5.4.24 NI Water has been considering the potential impact of unannounced sampling on WwTW compliance through an ongoing project. Although this project has predominantly been assessing the extent of additional opex which may mitigate

the effect of unannounced sampling, potential capex interventions have also been collated. In the Draft Determination, the Utility Regulator allowed the full amount for opex on the basis that they 'reserve the right to reconsider' on the basis of NI Water providing additional supporting evidence. It is understood that although additional opex may assist some WwTWs to achieve compliance, it may have to be complemented by capex delivery.

5.4.25 The £33m for capital intervention identified in our PC21 Business Plan was a high level estimate. We have commenced development of a more detailed plan for Mature Compliance / Reforming Wastewater Compliance Capex and this is included as a PC21 Development Output project in Annex 5.5. We have been working with NIEA to develop this detailed plan.

5.4.26 We have identified 11 capital investment intervention categories across 51 WwTWs that do not have significant planned investment in PC21. High level costs have been derived from a desktop exercise to demonstrate the need for an amount at least equal to the £33m proposed in our Business Plan. Based on our analysis of these 51 WwTWs, we estimate that c60% of the capital investment allocation for this Wastewater Regulation Reform Development Output will be enhancement funding.

5.4.27 The Wastewater Regulation Reform Capital Intervention funding will also be used to undertake pilot studies on various technologies which will help optimise investment decisions in PC27 and beyond.

5.4.28 This development output will involve working with NIEA to prioritise and refine this investment to mitigate compliance risk from Wastewater Regulation Reform. NIEA have confirmed that they will support our proposal to include Reforming Wastewater Compliance Capex in the Final Determination.

5.4.29 The above approach aligns with the 'Alternative Botex approach' mentioned in the Draft Determination in that it uses a mix of capital and operational expenditure in a way which will reduce overall costs while delivering the same or improved service to consumers.

5.4.30 We request that the Utility Regulator considers inclusion of capex for Mature Compliance / Reforming Wastewater Compliance in the Final Determination as a Development Output.

DRRM Maturity

5.4.31 The Utility Regulator has confirmed that NI Water's decision to introduce a forward looking risk based approach to establishing capital maintenance requirements using our Deterioration Risk and Reliability Model (DRRM) is a positive development particularly for WTWs, RWPS and WPS. The DRRM covered all four service areas initially but following a review of the outputs the model for Sewage Infrastructure was not used to inform the PC21 submission.

5.4.32 We accept that our DRRM is in the early stages of implementation and that confidence in the outputs will need to develop over time through utilisation and validation. We will maintain our focus on data quality and output validation of the DRRM moving forward. A 'real world' check will always be required and any outputs delivered on the ground will be agreed at expert and challenge panels in the lead up to year on year delivery in PC21.

5.4.33 DRRM has enabled a step change in our understanding with regard to capital maintenance planning and performance and risk management. New technologies and analysis techniques such as reliability centred maintenance will enable further efficiencies to be planned for PC27 and beyond.

5.5 CAPITAL EXPENDITURE PROFILE

Planning Delivery of PC21 Capital Investment

5.5.1 NI Water is very aware of the challenges presented by the planned increases in the PC21 capital programme from PC15 levels. We agree that the increase of 35% (£53m) in the first year of PC21 and between 15% and 21% in the three subsequent years can only be delivered by having a clear plan with well-defined solutions and procurement in place.

5.5.2 The Utility Regulator highlights the requirement for NI Water to have a reasonable understanding of the budget available to allow planning and procurement of the works. NI Water believes that knowledge of the available funding is the critical factor in planning the delivery of this challenging programme and that delivery of the programmes for the initial years will be extremely difficult if this is not confirmed as a matter of urgency.

5.5.3 NI Water is assuming that the PC21 plan will be funded, but also that the resourcing of the work, particularly in the earliest years, will be sufficient to meet the efficiency challenge. This challenge is founded on the levers set out in NI Water's efficiency plan / model being exercised.

5.5.4 NI Water is cognisant of the risks that the potential increase in the size of capital work programmes in Ireland and Great Britain may pose to PC21 delivery in terms of both cost and timescales since there is strong likelihood that these regions may be drawing on the same pool of contractor and consultant resources. This may be further exacerbated through any government initiative to stimulate economic growth through investment in infrastructure as a whole.

5.5.5 We have been working diligently since the start of this financial year to plan the procurement and delivery of the works and to establish the internal and external resource necessary for this.

5.5.6 In terms of procurement of delivery teams, we are planning to utilise our established Consultant and Capital Delivery Frameworks for at least the early years of PC21 along with the recently established IF105 Integrated Partnerships Framework.

5.5.7 Work has also commenced procurement of a Major Project Partnership Framework (MPPF) which will be used to deliver major projects (i.e. those greater than £10m) such as the larger LWWP projects. This procurement is at a relatively early stage but has been approved by NI Water Board.

5.5.8 We have completed Ops Risk and Affordability exercises on a range of water and wastewater projects and have already commenced Early Contractor

Involvement on a number of projects in preparation for the commencement of construction.

Programme to deal with Uncertainty

5.5.9 In our PC21 Business Plan we were cognisant of the need to differentiate between projects where the scope was adequately developed to allow reliable costing of preferred solutions and those projects requiring significant development work (e.g. modelling) to reach that stage. Our PC21 Business Plan profiling was designed to accommodate the timescales necessary to develop projects where necessary. We also made more extensive use of the development output process for PC21 compared to previous price controls.

5.5.10 We welcome the fact that the Utility Regulator has supported this approach in the PC21 Draft Determination, particularly in the approach to sub-programmes SP12 and SP16.

5.5.11 The Utility Regulator states in the PC21 Draft Determination that the uncertainties associated with development of solutions for SP12 and SP16 in particular are such that detailed work is required to address critical issues such as volume of storage, the location and configuration of the plant, land acquisition and access arrangements. These uncertainties need to be resolved before NI Water can increase scope certainty and the Utility Regulator can finally determine an efficient cost for these projects with confidence.

5.5.12 Many of our Drainage Area Plans will only complete in the next two years so we welcome the opportunity to undertake further assessments and improve the costing of our wastewater treatment works and UID solutions before they are committed.

5.5.13 The Utility Regulator requested in the PC21 Draft Determination that NI Water submit the following by the end of November 2020:-

- Statements of the WwTW and sewerage schemes whose scope is sufficiently well developed to allow them to be included in the Final Determination and

- Programmes of further study and development work necessary to confirm the scope and costs of the remaining WwTW and sewerage schemes included in our Business Plan

5.5.14 We provided the required statement of sufficiently developed projects and a programme of further work for other projects to the Utility Regulator on 30 November 2020. The commentary from this submission is included in Annex 5.17.

NI Water Review of Capital Expenditure Profile

5.5.15 NI Water has reviewed and adjusted the capital expenditure profile submitted with our PC21 Business Plan in January 2020. There are two key spreadsheets that describe the rationale, adjustments and impact on the capital expenditure profile project by project:

- Annex 5.2 – NI Water Proposed Adjustments – this spreadsheet focuses on the acceptance or not of the Utility Regulator's determination. It also prompts the reader where to find the evidence and new information to validate a revised determination.
- Annex 5.20 – PC21 Capital Expenditure Revised Profile – this spreadsheet builds the capital expenditure profile on the assumption that all of NI Water's recommended adjustments are accepted. It also takes account of revised carryover from PC15. The interface between PC15 and PC21 is fully modelled in Primavera 6 and can be examined if necessary.

5.5.16 At this point we have maintained all of the outputs identified in the PC21 Business Plan inside the PC21 period. Additionally, we have tried to keep the capital expenditure total profile as close to the PC21 Business Plan planned profile as possible. It is acknowledged that this submission is an interim position with respect to the number and cost of projects that are determined and we will adjust and agree the final capital expenditure profile as our positions converge.

5.5.17 We have therefore developed a revised profile of investment, including key milestone dates, which is summarised in Table 5.6 and Figure 5.4. The detailed profiles for each project are included in an amended version of Regulatory Table 3.3 in Annex 5.20 (Scenario 1).

Table 5.6: Proposed Capital Expenditure Profile vs PC21 BP Profile

£M	Yr1	Yr2	Yr3	Yr4	Yr5	Yr6
BP	233.154	272.027	310.595	371.549	383.924	336.306
DD Response	187.929	248.899	314.914	409.612	409.866	356.822
Variance	(45.225)	(23.128)	4.319	38.062	25.942	20.516

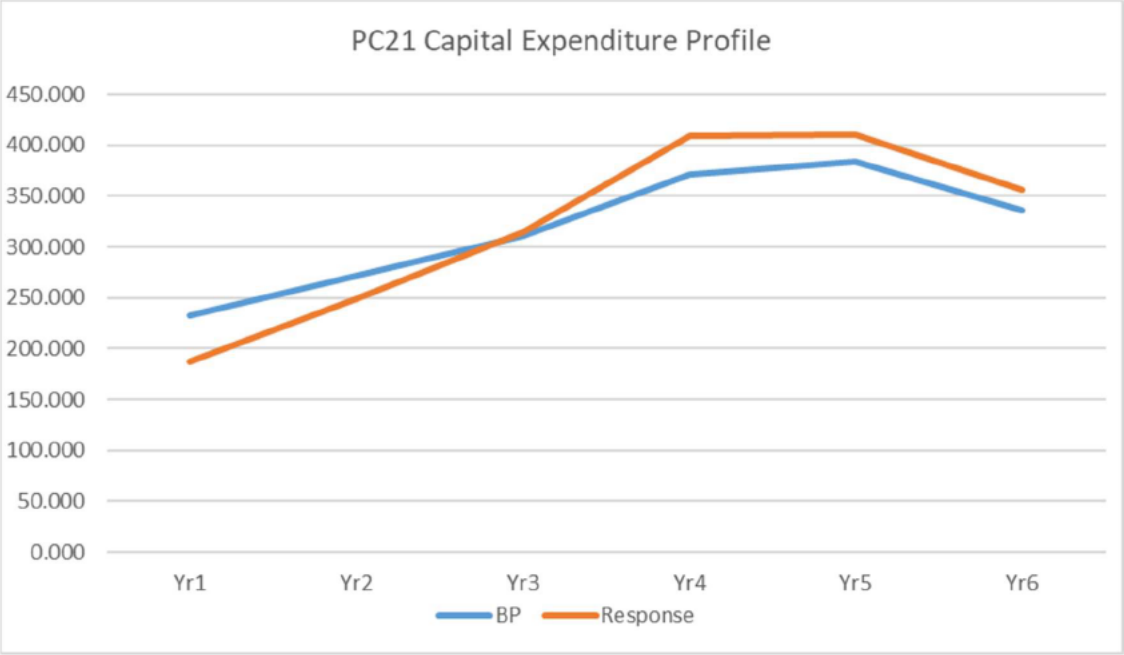


Figure 5.4 Proposed Capital Expenditure Profile vs PC21 BP Profile

5.5.18 The profile shown is provided for information only to illustrate the likely shape and size of the capital expenditure profile should the following occur:

- All NI Water's recommendations to the Draft Determination are accepted;
- The carryover from PC15 to PC21 increases by c£45m; and
- All nominated outputs are completed in period.

5.5.19 There are a number of factors that have occurred since the PC21 Business Plan submission and PC15 outturn report in January 2020. This means that

we are carrying over an additional c£45m of projects into PC21 that were not anticipated in the PC21 Business Plan. The key changes are:

- Existing carryover changes - Significant unanticipated changes beyond our control have occurred to key projects over the period;
- Onset of COVID-19 pandemic – This has caused a huge amount of uncertainty and disruption in period. The Capital Expenditure profile costs and programme submitted with our PC21 Business Plan have been adjusted in this estimate to account for this;
- In-year funding uncertainty - In October 2020 we were awarded significant additional in-year funding that enabled many critical projects that had been removed from the PC15 plan to start. Additionally some new high priority projects outside of the PC15 plan were started such as legionella and asbestos investigations.

5.5.20 These adjustments and additions will be discussed and agreed in due course through a revised PC15 Outturn report to be submitted in January 2021. This report will form the basis for a detailed monitoring database for the capital work programme powered by Primavera 6 for PC21 delivery dates and outputs.

5.5.21 Annex 5.20 is based on the Beneficial Use dates in our current P6 delivery programme and uses the project costs proposed in our Draft Determination response.

5.5.22 This will allow tracking of project costs through PC21 Business Plan, Draft Determination, NI Water Response to the Draft Determination and ultimately the Final Determination.

NI Water Primavera 6 (P6) Plan and Future Submissions for Determination

5.5.23 NI Water has produced a detailed Primavera 6 (P6) plan for delivery of all PC21 projects which includes both projects for which the scope is sufficiently developed to allow confident determination now and projects which require further assessment work to define their scope (e.g. Development Output projects). We will continue to refine this P6 plan to inform the Final Determination and our PC21 Monitoring Plan.

5.5.24 NI Water has submitted details of proposals for submission of SP12 and SP16 projects in batches for determination before the Mid Term Review. These batches relate to projects which were not sufficiently developed for determination at Final Determination stage. It is important that it is recognised that work on these projects will continue after the batch is submitted to ensure that the projects are ready for construction after the Utility Regulator makes their final determination.

5.5.25 NI Water intends to monitor the delivery of key milestone dates in PC21 as a lead indicator of successful delivery of the capital programme and welcomes the Utility Regulator's proposal to do likewise.

5.6 CAPITAL EXPENDITURE BUDGET

5.6.1 We concur with the Utility Regulator's statement that the delivery of the outputs and outcomes included in NI Water's Business Plan is dependent on the availability of public expenditure Capital DEL to support the necessary investment.

5.6.2 As mentioned above it is essential that the Capital DEL required to deliver the PC21 programme is confirmed as a matter of urgency to facilitate efficient planning and delivery of our PC21 capital programme.

5.7 CAPITAL INVESTMENT OUTTURN FOR PC15

5.7.1 We understand that the assessment of logging up and logging down in PC21 Draft Determination Annex H will need to be reassessed for the Final Determination based on the latest information available at that time.

5.7.2 For this Draft Determination response, we have generated a PC15 Outturn Report based on information up to 9 December 2020 and this is included at Annex 5.21.

5.7.3 We will issue a further update to the Utility Regulator at the end of January 2021 for use in the Final Determination.

5.8 CAPITAL INFLATION AND REGIONAL PRICE ADJUSTMENT

Capital Inflation

5.8.1 NI Water welcomes the Utility Regulator's recognition of the risk that capital inflation represents to NI Water's purchasing power and the delivery of outputs.

5.8.2 NI Water understands that the Draft Determination uses the forecast figures which NI Water used when preparing its Business Plan and that these figures will be updated for the Final Determination to take account of the latest projections of inflation and, in particular the impact which the response to COVID-19 has had on inflation in the short term. The potential impact of Brexit may also need to be considered.

Regional Price Adjustment

5.8.3 NI Water has reviewed 'Regional Price Adjustments PC21 (CEPA)' included in Annex J of the Draft Determination.

5.8.4 We commissioned Chandler KBS to undertake a review of this document. Our response to Annex J is included in Annex 5.22.

5.9 CONCLUSION

5.9.1 As outlined above, NI Water has agreed with and accepted a large proportion of the Draft Determination capital allocation and outputs. We have provided evidence to support our challenges to the Draft Determination relating to the following key aspects:-

- Removal of the Generic Reporter Adjustment;
- Reinstatement of funding for a range of projects which was disallowed;
- Adjustment of funding allowed for projects where better information is now available; and
- The quantum of Consequential Capital Maintenance allowed.

5.9.2 We have also provided an updated Capital Expenditure Profile based on our P6 Delivery Programme which has been recently developed in conjunction with

our Delivery teams. This reflects our previously submitted November 2020 Scope Certainty exercise.

5.9.3 We will continue to work with the Utility Regulator to develop the PC21 Final Determination providing additional information and inputs to the Utility Regulator's assessment for all aspects of the capital investment programme.

5.10 SCHEDULE OF CAPITAL INVESTMENT RELATED ANNEXES

5.10.1 The Capital Investment and Efficiency related annex documents are scheduled below:

Table 5.7 – List of Capital Related Annexes

ANNEX No.	SP No.	ANNEX Title
5.1	All	Summary of NI Water Sub-programme DD Responses
5.2	All	NI Water Proposed Adjustments to the DD
5.3	All	Generic Reporter Adjustment Response
5.4	SP00	Capitalised Salaries and On-Costs Response
5.5	SP02	Wastewater Regulation Reform Capex Interventions
5.6	SP04	NIW Alpha WTWs Treatability Improvements Response
5.7	SP20	Smart Metering New Business Case
5.8	SP20	CPMR Re-Platform Updated Business Case
5.9	SP20	PftF IOC, Energy Efficiency and EV Charging Response
5.10	SP20	PftF Energy Efficiency Updated Business Cases
5.11	SP23 & SP24	Public Realm Water and Wastewater Response
5.12	SP03	Controlled Reservoir Maintenance & Inspections Response
5.13	SP07	SR Rehabilitation Programme Response
5.14	SP10	Ops Capital Water New Connections
5.15	SP17	Rural WwTW Programme Response
5.16	SP19	Metering Programme Response
5.17	SP12 & SP16	Scope Certainty Exercise Submission (End Nov 2020)
5.18	All	Purpose Allocation and Service Allocation Response
5.19	All	Consequential Capital Maintenance Response
5.20	All	PC21 Capital Expenditure - Revised Profile
5.21	All	PC15 Outturn Report (End November 2020)
5.22	All	Regional Price Adjustment Annex J Response
5.23	All	A Guide to Integrated Appraisals - Development Output
5.24	SP04	DWI Response Letter to NI Water Annex A's
5.25	SP04	NI Water Annex A's Submission Response
5.26	SP20	Estate and H&S Facilities Management Overlaps Response
5.27	SP20	H&S Facilities Management Update
5.28	SP16	Wastewater Study Work

6 OUTPUTS AND OUTCOMES

SUMMARY

This chapter deals with the Utility Regulator's proposals in relation to the outputs and outcomes. NI Water acknowledges that the Utility Regulator has, in the main, agreed with and accepted our proposals for outputs, which are linked to our capital investment programme.

This chapter provides some further information on our position and also provides a response to the Draft Determination.

6.1 CUSTOMER SERVICE OUTCOMES

6.1.1 The collaborative working of the PC21 Consumer Engagement Oversight Group (CEOG) and the Consumer Measures / Satisfaction (CM/SAT) group has been influential in ensuring that we build customer views into our plans and put customer needs at the heart of our service delivery.

6.1.2 We welcome that the Utility Regulator has accepted our new Key Performance Indicators (unwanted contacts, First Point of Contact Resolution and Net Promoter Score) and the associated targets for PC21. We note the intention to review the targets at the Mid-Term Review.

6.1.3 The rationale for introducing our new customer measures is that they are more representative of our customers' experience. In our view, targets for DG6, DG7 and DG9 have the potential to drive the wrong behaviours. While we populated the PC21 tables with PC15 Final Determination targets, we would ask the Utility Regulator to consider dropping these as targets in PC21. We recognise that, while OPA continues to be monitored, it will be necessary to record DG6, DG7 and DG9 to enable OPA to be calculated. However, this does not require targets to be set for DG6, DG7 and DG9.

6.1.4 We welcome that the Utility Regulator is proposing to retire Overall Performance Assessment (OPA) in PC21, albeit we note the intention to continue to monitor OPA. In our view the key service measures which underpin the OPA continue to have targets set and it is these which are important as well as new metrics to measure customer experience.

6.1.5 We welcome the support of CEOG in our move from periodic surveys to assess customer expectations to more ongoing participatory engagement with our customers and we have included a development output to reflect this.

6.1.6 We look forward to continuing to work with the Utility Regulator and other stakeholders on CEOG and the CM/SAT working group to identify opportunities for new customer metrics and KPIs including those relevant to our customers who find themselves vulnerable.

6.1.7 We are committed to working with the Utility Regulator in its Consumer Protection Programme and have included a development output to reflect this.

6.2 WATER OUTPUTS AND OUTCOMES

6.2.1 NI Water welcomes that the Utility Regulator has, in the main, agreed with and accepted our proposals for outputs, which are linked to our water capital investment programme.

DG2 Properties receiving pressure below the reference level at end of year

6.2.2 The Draft Determination has assessed that NI Water has overestimated DG2 additions in the period and has set more challenging targets for number of properties on the DG2 register at the end of each year.

6.2.3 NI Water has produced a structured plan for the full refresh of NI Water's low pressure (DG2) register to establish an accurate baseline of properties affected by low pressure. This is presented in Annex 6.1 and includes completion of the tasks necessary to complete low pressure investigations and the delivery of planned data quality improvements. NI Water believes that the PC21 targets

for number of properties on the DG2 register are likely to change significantly after refresh of the low pressure register.

6.2.4 Whilst it is logical to set targets for the removal of properties from the at-risk register, we think setting a target for the number of properties on the DG2 register is less useful as it is dependent on the forecast of additions. In our PC21 Business Plan, we proposed that the number on the register should not be a Monitoring Plan target. Clearly, it is in customers' interests that we have the most accurate register of properties receiving low pressure, even if this means that the total number on the register increases over time.

6.2.5 If targets are to be set, it may be prudent to postpone setting the target for the number of properties on the DG2 Register until the refresh is complete in mid-2021, by which time the movement in numbers will have settled.

6.2.6 We welcome the Utility Regulator's intention to engage with NI Water between the Draft and Final Determination to better understand the movement in register numbers and the real benefits being delivered. This engagement will need to continue throughout 2021 until the register is refreshed and DG2 removal schemes are costed and prioritised for construction.

DG3 Supply Interruptions (overall performance score)

6.2.7 The Draft Determination stated that the PC21 target was the upper boundary of a calculated range but the tables included the central estimate. The targets have been clarified as part of the query process and NI Water is content to accept the Utility Regulator's proposed challenge on this.

Water mains activity – Length of new, renewed or relined mains

6.2.8 Based on capital investment proposed, the Utility Regulator has applied a more challenging target of 788km of water mains compared to our 668km. NI Water is content to accept this.

Table 6.1: Water Mains Activity

Water mains activity (km)	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
Business Plan	111.00	111.00	111.00	111.00	112.00	112.00
Draft Determination	131.35	131.35	131.35	131.35	131.35	131.35

Completion of nominated Water Treatment Works schemes

6.2.9 The Draft Determination has reduced the number of Water Treatment Works schemes by 4 relating to Alpha PPP sites and the associated £7.4m enhancement investment. We believe this is incorrect and have provided further evidence to make the case in Annex 5.6.

6.2.10 The Utility Regulator's rationale is that NI Water should have assured itself that it was taking over fit for purpose assets which were operationally robust and capable of meeting regulatory standards. Ownership and appropriate associated due diligence is not the issue here.

6.2.11 The proposed water quality enhancements arise from recent treatability studies. Prior to acquisition, the only way NI Water would have been assured the assets identified in the treatability studies were delivered would be an Authority Change under the contract, for which NI Water would be liable for the costs. This remains the position today, post-acquisition.

6.2.12 Following review of the PC21 capital expenditure profile, the profile for delivery of nominated water treatment works has changed slightly although the overall total remains the same.

Table 6.2: Water Treatment Works

Water Treatment Works (cumulative)	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
Business Plan	1	3	5	12	13	22
Draft Determination	1	3	5	8	9	18
Draft Determination Response	1	1	6	10	11	22

Leakage

6.2.13 Our PC21 Business Plan proposed a leakage target in 2026/27 of 150Ml/d which is the most recent estimate of the Sustainable Economic Level of Leakage (SELL). We welcome that the PC21 Draft Determination has accepted this. We note that the Utility Regulator is continuing to review the information presented in order to justify the associated expenditure.

6.2.14 At the time of the PC21 Business Plan, we were forecasting 2019/20 leakage to outturn at 159 Ml/d. The leakage outturn for 2019/20 was 160.5 Ml/d. We have run 3 scenarios whereby we reduce leakage in 2020/21 by 1.5 Ml/d, 2.0 Ml/d and 2.5 Ml/d and the output figures would be 159 Ml/d, 158.5 Ml/d and 158.0 Ml/d respectively. This compares against forecast in our PC21 Business Plan of 157 Ml/d.

6.2.15 On the basis of each of above outputs we have profiled the PC21 targets ending up with the 2026/27 target of 150 Ml/d which are shown in the table below.

Table 6.3: Leakage

Year	Scenario 1 (Ml/d)	Scenario 2 (Ml/d)	Scenario 3 (Ml/d)	DD Profile (Ml/d)	Proposed Profile (Ml/d)
20/21	**159.0**	**158.5**	**158.0**		
21/22	157.5	157.0	156.7	155	157
22/23	156.0	155.7	155.3	154	156
23/34	154.5	154.3	154.0	153	154
24/25	153.0	152.8	152.7	152	153
25/26	151.5	151.4	151.3	151	151
26/27	150.0	150.0	150.0	150	150

6.2.16 We have assessed a proposed profile for the PC21 period which would allow us to get from the 2019/20 output figure of 160.5 Ml/d to the SELL target of 150 Ml/d as outlined above. We would appreciate if this proposed profile could be included in PC21 Final Determination.

Profile of other Water Nominated Outputs

6.2.17 Following review of the PC21 capital expenditure profile, the profile for delivery of a number of other nominated outputs has changed slightly although the overall total remains the same.

Table 6.4: Trunk Mains

Trunk Mains (cumulative)	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
Business Plan	0	4	4	7	8	14
Draft Determination	0	4	4	7	8	14
Draft Determination Response	0	2	3	8	10	14

Table 6.5: Service Reservoirs and Clear Water Tanks

Service reservoirs and clear water tanks (cumulative)	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
Business Plan	0	0	0	0	3	3
Draft Determination	0	0	0	0	3	3
Draft Determination Response	1*	1	1	1	4	4

*Drumaroad carry-over

6.3 SEWERAGE OUTPUTS AND OUTCOMES

6.3.1 NI Water welcomes that the Utility Regulator has, in the main, agreed with and accepted our proposals for outputs, which are linked to our wastewater capital investment programme. We are pleased that new metrics for removal of economic development constraints have been accepted as well as the associated targets for PC21.

DG5 Properties on the 2 in 10, 1 in 10 and 1 in 20 risk register at the end of the year

6.3.2 The Draft Determination has assessed that NI Water has overestimated DG5 additions in the period and has set a more challenging targets for the number of properties on the DG5 register at the end of each year.

6.3.3 Whilst it is logical to set targets for the removal of properties from the at-risk register, we think setting a target for the number of properties on the DG5 register is less useful as it is dependent on the forecast of additions. In our PC21 Business Plan, we proposed that the number on the register should not be a Monitoring Plan target. Clearly, it is in customers' interests that we have the most accurate register of flood risk properties, even if this means that the total number on the register increases over time.

Profile of Wastewater Nominated Outputs

6.3.4 Following review of the PC21 capital expenditure profile, the profile for delivery of a number of wastewater nominated outputs has changed slightly although the overall total remains the same.

Table 6.6: Wastewater Treatment Works

Wastewater Treatment Works (cumulative)	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
Business Plan	4	4	5	14	27	45
Draft Determination	4	4	5	14	27	45
Draft Determination Response	0	5	21	24	31	45

Table 6.7: UIDs

UIDs (cumulative)	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
Business Plan	4	22	39	55	77	136
Draft Determination	4	22	39	55	77	136
Draft Determination Response	7	28	49	62	87	136

Wastewater Compliance

6.3.5 In our PC21 Business Plan we set out our proposed targets in relation to:

- % of WwTWs discharges compliant with numeric consents; and
- % of total PE served by WwTWs compliant with numeric consents excluding upper tier failures.

6.3.6 Both metrics were projected to see a dip in performance due to five sites crossing 250 pe threshold predicted to fail in 2021, projected non-compliance of Newry WwTW and Warrenpoint WwTW in 2022 as well as predicted fails at four sites which have experienced gross exceedances during recent unannounced sampling pilot. Furthermore, we used updated population equivalent data in our projections.

6.3.7 The PC21 Draft Determination has made a number of slightly different assumptions. It has assumed sites which failed unannounced sampling pilot will continue to pass since the compliance framework is not due to change in PC21 and only 50% of the sites crossing 250 pe threshold will fail. The PC21 Draft Determination has used current population equivalent figures rather than the higher updated dataset.

6.3.8 As a result, while the PC21 Business Plan proposed targets follow a similar trajectory to the PC21 Draft Determination, they lie at the bottom of, or below, the Utility Regulator's predicted operating range.

5 small WwTW crossing 250pe

6.3.9 Upon consideration, we accept the Utility Regulator's approach that only 50% of sites would fail (i.e. 3 fail and 2 pass out of 5 works).

Population equivalent

6.3.10 Discussion has completed with NIEA and approval reached on the new methodology for assessing population equivalents (pe).

6.3.11 Further refinement of the pe dataset has been carried out to improve the accuracy of actual pe data, which has resulted in a new actual pe dataset being derived at Draft Determination review stage. This dataset has been shared with NIEA for approval and we have recalculated the PC21 targets using this data.

6.3.12 Since the Business Plan submission, NI Water has launched a corporate asset register application on its intranet site, which integrates DfI Planning data on residential and commercial applications (110,000+ records) on approximately a weekly basis. That data is then merged with a number of NI Water GIS datasets including:

- Pre-Development Enquiries managed by Developer Services
- New Water and Sewer Connections managed by Developer Services
- Various administrative boundaries including parliamentary constituencies and council areas managed by OSNI

6.3.13 By accessing these datasets and interrogating them using standardised methods of analysis, NI Water will gain more knowledge of the urban growth and development occurring within its sewer catchments. This in turn will facilitate the further refinement of pe data sets during PC21.

6.3.14 At periodic intervals in PC21, the actual pe data will be updated following discussion with NIEA and changes will then be reflected in the wastewater

compliance targets, in accordance with relevant AIR line methodology. Depending on the significance of the impact of periodic pe reviews on the PC21 Final Determination targets, there may be a requirement to trigger a change control to reset the wastewater target for % pe during the PC21 period.

WwTW failed in unannounced sampling pilot

6.3.15 The PC21 Business Plan is forecasting additional works predicted to fail under the current announced sampling regime compared to PC15. This forecast is based on knowledge gained through the unannounced sample pilot undertaken during 2019. With a greater understanding of the condition and performance of our asset base, issues have come to light, one being on normal levels of compliance. The Executive Committee has committed to reporting the actual level of performance at WwTWs, which reflects normal levels of operations.

6.3.16 Two of our company values are particularly pertinent in this regard:

- Integrity – 'building trust by operating ethically and holding ourselves accountable'
- Sustainability – 'we deliver our services in a responsible and environmentally friendly manner'.

6.3.17 In light of the insight now available for normal levels of operations WwTW performance through the unannounced pilot, it will be outside the spirit of the regulations to continue to report positive compliance performance at these particular works. We believe it is now appropriate to forecast some additional sites as fails. Whilst these sites were predicted to fail in PC15, a reduced wastewater monitoring programme associated with Covid-19 restrictions has skewed 2020 performance. NIEA have assumed all samples not collected in the 3 month period April to June 2020 passed. This period coincided with a prolonged spell of dry weather period and spring sloughing, when there was a greater risk of failure.

Our proposals

6.3.18 As a result of changed assumptions above, reviewed pe dataset and re-profiling of wastewater capital expenditure delivery dates, our revised proposals are set out in Tables 6.8 and 6.9. Detailed workings are provided in Annex 6.2.

Table 6.8: % WwTWs compliant with numeric consents

% WwTWs compliant with numeric consents	2021	2022	2023	2024	2025	2026
Business Plan	91.29	90.83	91.63	91.63	91.63	93.28
Draft Determination	92.44	92.02	92.44	93.00	93.28	94.54
Revised Proposal	92.08	91.67	91.67	94.54	94.96	96.22

Table 6.9: % pe served by WwTW compliant with numeric consents

% pe served by a compliant WwTW	2021	2022	2023	2024	2025	2026
Business Plan	99.07	94.60	94.94	94.94	94.94	95.02
Draft Determination	98.35	94.94	95.17	95.46	95.6	95.41
Revised Proposal	99.20	94.67	94.67	95.61	95.63	95.75

6.3.19 We have been made aware that Belfast Lough will be designated as sensitive under UWWTD Annex 2a(c) for protection of shellfish by the end of December 2020. DAERA has yet to set the policy on how compliance will be assessed following the designation. When policy decisions are issued by DAERA, there may be a requirement to recast the PC21 targets, if Water Order Consents are reviewed prior to delivery of the Living With Water Programme capital upgrades.

Pollution incidents

6.3.20 NI Water acknowledges that good progress has been made in recent years to reduce the number of high and medium pollution incidents attributable to the company. Whilst we have seen a stepped improvement in 2018 and 2019, we do not have confidence that this trend will continue, particularly with the extent of economically constrained areas identified.

6.3.21 In our PC21 Business Plan, we sought to take a balanced approach to target setting in PC21 based on the PC15 Final Determination target, with a continuing improvement in performance year on year, whereas the PC21 Draft Determination projects targets from current actual performance. This results in a target which may not be achievable in any given year.

6.3.22 There has been no consideration given to the insight that will be readily available on spill performance when the data reporting from event and duration monitors on CSOs is implemented. Furthermore, at Regulatory Sub Group meeting (September 2020) NIEA advised that the approach to inspections will change. The inspection programme has been amended to focus on the works within the Drainage Area Studies submitted to NIEA to date. These inspections will concentrate on upstream and downstream of the outfalls from WwTWs, in conjunction with WwPS and CSO outfalls. Given that the NIEA are now focussing inspections in the catchments prioritised for Drainage Area Studies, we believe there is an increased risk that unsatisfactory intermittent discharges may be recorded as pollution incidents. It is therefore prudent to make some allowance for this in the pollution incident targets.

6.3.23 The performance against pollution incident targets varies due to a wide range of factors. These include weather (especially prolonged dry weather spells when more settlement in sewers occurs due to a reduction in flows and consequential lowering of the self-cleansing velocity to keep everything in suspension), seasonality, customer behaviours regarding flushing habits, trade effluent discharges and rogue discharges to sewer. It is not unusual to see pollution incident numbers increasing during periods of sustained dry periods, as our experience of managing the sewerage system over many years will show.

6.3.24 The following table is an extract from the performance in Spring of 2019 and 2020, which shows a marked increase in the number of incidents arising. In Spring 2020 we experienced an unprecedented number of low severity pollution incidents recorded in the wastewater network, associated with the prolonged dry spells of weather. As per NIEA regulatory approach, if a low

severity incident is not dealt with in a timely manner, it may be escalated to a medium severity incident, due to the impact of the discharge on the receiving watercourse. The Committee for Climate Change[1] predicts the continuing trend of drier summers, with summer rainfall reducing by 41%.

[1] UK Climate Change Risk Assessment 2017 Evidence Report – summary for Northern Ireland.

Table 6.10: Comparison of Spring pollution incidents

Pollution source	2019 26/03 – 05/06	2020 26/03 - 05/06	% Increase
CSOs	5	10	100%
WwPS's	5	9	80%
WwTW's	5	7	40%
Sewer Network	11	31	182%
Water Network	0	2	200%

6.3.25 We note the Reporter recommendations from the PC21 review which the Utility Regulator expects implemented. Until such times as these recommendations are in place, particularly the link between investment and service for the wastewater infrastructure sub-service, we do not have confidence that the performance levels experienced in 2019 can be sustained.

6.3.26 Considering the difference in the target from the Business Plan starting position to the Draft Determination starting position, we propose a starting position of midway between the 2 figures, as detailed in Table 6.11:

Table 6.11: Proposed pollution incidents target

Year	BP	DD	Proposed
2021	20	12	16
2022	19	11	15
2023	18	10	14
2024	17	9	13
2025	16	8	12
2026	15	7	11

6.3.27 Whilst every effort will be made to avoid pollution incidents arising, they are inevitable, broadly as a consequence of third party action.

6.3.28 Another option is to add pollution incidents to the group of metrics which have a performance range due to the potential variability of performance for the measure as outlined above.

Table 6.12: Proposed pollution incidents range

Year	BP	DD	Range DD - Proposed
2021	20	12	12 - 16
2022	19	11	11 - 15
2023	18	10	10 - 14
2024	17	9	9 - 13
2025	16	8	8 - 12
2026	15	7	7 – 11

6.3.29 Setting the pollution incident target at the upper bound of the range would be the minimum level of performance that NI Water should achieve. This approach mitigates the starkness of a point target in the context of the challenges facing the sewerage infrastructure due to capacity issues coupled with the impact of blockages arising due to third party action.

6.4 DELIVERY OF NOMINATED OUTPUTS

6.4.1 As outlined in section 5.5.15 and above, NI Water has reviewed and adjusted the capital expenditure profile submitted with our PC21 Business Plan in January 2020. The Utility Regulator and quality regulators have raised concerns that the delivery profile for many of the nominated outputs proposed in our PC21 Business Plan occur towards the end of the price control period. We have sought to bring forward these where possible.

6.4.2 The number of nominated outputs proposed in our PC21 Business Plan has not changed but the delivery profile has. A revised table 4.4 is included as Annex 6.3.

6.4.3 We will continue to work with the Utility Regulator and quality regulators to deliver the programme as early as practicably possible.

6.5 DEVELOPMENT OUTPUTS

6.5.1 In our PC21 Business Plan, we proposed 23 development outputs. We note the Utility Regulator has not reviewed all of them yet and will do so between Draft and Final Determination. We welcome early engagement on these.

6.5.2 Following our engagement with the Utility Regulator before and after publication of the Draft Determination, NI Water has identified four additional development outputs as set out below.

WwTW Mature Compliance – Capex Interventions.

6.5.3 This Development Output will target very specific capital interventions to complement or optimise the Mature Compliance opex interventions in towns that have no capital investment planned in PC21. Further details on this Development Output are provided in Annex 5.5.

SP12 - SP16 Scope Certainty

6.5.4 This Development Output will define the process and governance to allow project costs and outputs in sub-programmes 12 and 16 to be confirmed or re-determined through the change control process in time for the mid-term review and in time for the work to be incorporated in the last three years of PC21. Further details on this Development Output are provided in Annex 5.17.

A Guide to Integrated Investment Appraisals.

6.5.5 This Development Output will require NI Water to work with DfI and the Utility Regulator to develop and agree a new approach to investment appraisal to provide wider outcomes (in the context of 6 capitals) and how this will be implemented in relation to the allocation of funding, governance, reporting and monitoring. Further details on this Development Output are provided in Annex 5.23.

Intelligent Operations Centre (IOC) Business Case

6.5.6 A key element of 'Planning for the Future' investment was our IOC, enabling us to be smarter at using our vast amount of data and working in a more joined up

way to predict and prevent asset failures. We are reviewing our plans in light of COVID-19 impact on ways of working and will update the Business Case accordingly.

6.6 ANNEXES

Annexes related to this chapter are as follows:

- Annex 6.1 – Plan for DG2 Low Pressure Register Refresh
- Annex 6.2 – PC21 Wastewater Compliance workings
- Annex 6.3 – Table 4.4 (Revised)

7 PRICE LIMITS

SUMMARY

Price limits in the Draft Determination reflect the revised customer forecasts prepared in July 2020 as the impact of the COVID-19 pandemic on customer demand was becoming apparent. We welcome this.

The Draft Determination proposes a significant reduction to the cost of capital. Whilst acknowledging that the analysis underpinning this was carried out in March 2020 (pre COVID-19), we note the CMA's recent PR19 provisional determination, which points to materially higher returns and would expect to see this reflected when the Utility Regulator revisits cost of capital for the Final Determination.

We welcome the inclusion of additional regulatory depreciation within regulated revenues and agree that the approach adopted since PC10 may have resulted in existing customers paying too little, shifting the burden on to future customers. We commit to assisting the Utility Regulator with the review of 'broad equivalence' prior to PC27.

7.1 LWWP

7.1.1 In our PC21 Business Plan, in line with the recommendations of the LWWP project board, we assumed LWWP capital expenditure was to be grant funded. We note that in the Draft Determination it has been funded through tariffs. Treating LWWP capex in this way will ensure sufficient cash is generated to deliver the programme, however, this cash cannot be spent without the provision of sufficient Capital DEL cover. If the necessary Capital DEL budget is not forthcoming, this could lead to a situation whereby customers are paying for this significant programme of work which cannot be delivered due to funding constraints.

7.2 ALLOWED RATE OF RETURN

7.2.1 The Utility Regulator has determined a Weighted Average Cost of Capital (WACC) of 1.89% in 2021-22 falling to 1.55% in 2026-27. This compares to an implied WACC of 2.71% falling to 2.45% in NI Water's Business Plan. The major reduction is due to a much lower cost of equity, which has dropped from 4.47% in our Business Plan to 1.71% in the Draft Determination. We acknowledge that the analysis underpinning this was carried out in March 2020 (pre COVID-19) and therefore welcome the commitment by the Utility Regulator to revisit cost of capital for the Final Determination.

7.2.2 We note the CMA's recent determination in respect of the four companies (Anglian, Bristol, Northumbrian and Yorkshire) in which they recommended a higher return, largely linked to a higher cost of equity. Our advisors, Economic Insight, have analysed the provisional findings of the CMA alongside the approach adopted in the PC21 Draft Determination and have concluded that there is a strong rationale for the Utility Regulator to update the cost of equity assessment. Their report is included in Annex 7.1. Doing so would imply an updated cost of equity of between 2.97% to 3.17%. Using the CMA point estimate of 3.17% would imply a WACC of 2.12% in 2021-22 falling to 1.78% in 2026-27.

7.3 FINANCIAL SUSTAINABILITY

7.3.1 We welcome the inclusion of additional regulatory depreciation within regulated revenues and agree with the Utility Regulator that the approach adopted since PC10 may have resulted in existing customers paying too little, shifting the burden on to future customers.

7.3.2 In previous Price Controls we have highlighted our concerns with the continued 'cash' funding basis. Figure 7.1 has been copied from our response to the PC13 Draft Determination and shows that, proportionally, NI Water historically has received much less revenue from this source than our counterparts. We therefore welcome the Utility Regulator's proposals and commit to assisting with the review of 'broad equivalence' prior to PC27.

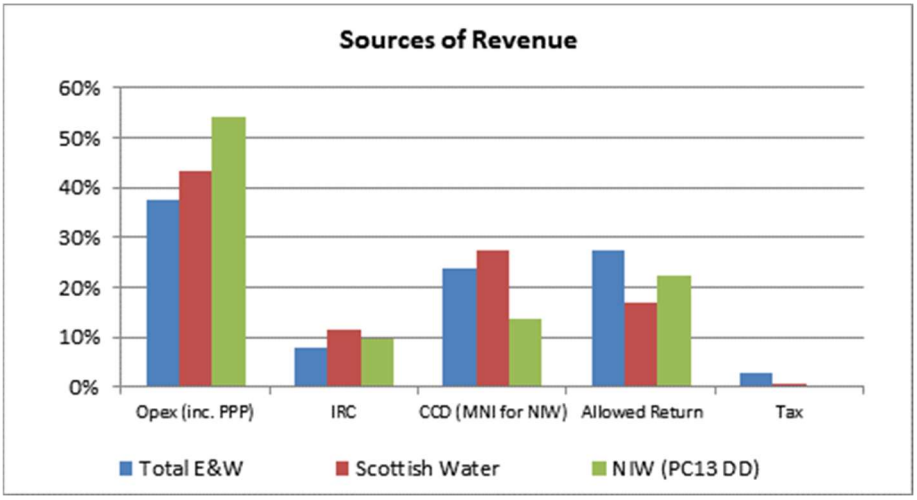


Figure 7.1: Comparisons of Revenue Building Blocks

7.4 TAXATION

7.4.1 We have analysed the taxation assumptions adopted by the Utility Regulator and are content that they largely mirror the assumptions used in our Business Plan, and the forecasts at that time. Since then, the current COVID-19 pandemic has had a significant impact on NI Water's 2020-21 financial projections. At this point in the year, we have forecast much higher tax losses feeding into PC21 than we had forecast within our Business Plan. These losses will therefore be available to offset profits within PC21 and will reduce the cash tax burden on our customers.

7.4.2 We also note the capital allowance allocations are based on the capital programme within NI Water's Business Plan and therefore don't fully align with the capital programme proposed in the Draft Determination. We are happy to meet with the Utility Regulator in advance of the Final Determination to agree revised capital allowance percentages.

7.4.3 In relation to calculation of taxable profit, the Draft Determination uses a notional gearing of 50% in order to calculate the tax deductible interest charge. Actual gearing is at a lower level than the notional figure which would result in a lower tax deductible interest charge and therefore a higher tax charge. We would ask the Utility Regulator to consider the use of actual gearing in this calculation.

7.5 PC15 REVENUE OVER-RECOVERY

7.5.1 The Draft Determination has used our Business Plan estimate of PC15 revenue over-recovery which was £57.9m in 2018-19 prices. This estimate included four years of actuals (2015-19) and a forecast of over-recovery in the 2019-20 year. We are now in a position to revise this number to include actuals for 2019-20 and a forecast for 2020-21. In summary, the positive variation in domestic subsidy has continued to grow offset by a significant reduction in non domestic income related to COVID-19. The result is a revised over-recovery of £60.1m within which the amount attributable to domestic customers has risen by £13.4m to £41.4m whilst non domestic income now accounts for £18.7m, a reduction of £11.3m.

Table 7.1 – adjusted DD price limits

	PC21 DD	Revised	Variance
RG3: domestic unmeasured water	15.3	21.7	+6.5
RG4: domestic unmeasured sewerage	12.8	19.7	+6.9
RG5: non-domestic measured water	17.6	12.3	-5.4
RG6: non-domestic measured sewerage	8.0	4.6	-3.4
RG9: trade effluent	4.2	1.8	-2.5
Total	**57.9**	**60.1**	**+2.2**

7.5.2 It is worth noting, that almost all of the non-domestic variance, results from higher than anticipated domestic allowance subsidy. We believe, the adjustment made in PC21 should reflect this if possible.

7.5.3 Whilst there are still several months of the 2020-21 year left, including it in the calculation of the PC15 over-recovery ensures it will be largely dealt within PC21 and therefore does not carry forward, resulting in additional charges for non-domestic customers in PC27.

7.6 2021-22 PRICE LIMITS

7.6.1 The deadline for our final 2021-22 tariff submission is 31st January 2021 at which time price limits for PC21 (and therefore 2021/22) will not have been determined. We have already engaged with the Utility Regulator and have discussed the option of using Draft Determination price limits for 2021-22.

7.6.2 Having further considered the option of using Draft Determination price limits, we have concluded that in order to avoid unnecessary tariff volatility in 2022-23 and beyond, they should reflect the following adjustments:

- **Revised revenue over-recovery (section 7.5.2)** - This revision takes account of the substantial non-domestic revenue reduction in the 2020-21 year due to the COVID-19 pandemic;
- **Revised inflation (section 7.9) -** Inflation forecasts for the PC21 period have materially changed from those assumed in the Draft Determination. In calculating the price limits for the Draft Determination, the Utility Regulator effectively solved tariffs in nominal terms, subtracting the assumed inflation figure each year give real price limits. In order to maintain these real price limits at the Draft Determination level, we would ask that tariffs are solved in real terms, instead of nominal terms within the Final Determination.

7.6.3 We have provided a revised version of the Utility Regulator's Draft Determination financial model in Annex 7.2, which incorporates these two adjustments. Use of these price limits would likely result in more stable tariffs and may remove the need to reduce the measured water tariff for the 2021-22 charging year on the back of a potentially larger increase the following year.

7.6.4 We will continue to engage with the Utility Regulator prior to our tariff submission in January 2021 with the aim of ensuring that price limits for the 2021-22 year do not diverge materially from the published Final Determination price limits.

7.7 PPP ALPHA INVESTMENT

7.7.1 Within the Draft Determination, the direct correlation between the unitary charge and the benefits we are passing back to customers has been ignored or misunderstood.

7.7.2 The Alpha unitary charge has been reduced by £3.1m over the PC21 period, with no corresponding reduction to the benefits we proposed to pass back to customers. If a reduction is made to unitary charge forecast, then the benefits we have proposed to pass back should be reduced by an equivalent amount.

7.7.3 We would also highlight that the capacity charge within the Alpha contract has been remodelled, resulting in an additional £9.5m of costs over the PC21 period. Given the circularity of costs resulting from our ownership of the delivery companies, we do not see the need for this to impact customer charges. We therefore propose that the return to customers is increased in line with the increase in unitary charges. This will ensure costs are reflected properly for monitoring purposes, without impacting customers.

7.7.4 We would add that we have been generous in passing back a large element of the projected distributions from our investment early, and should there be further potential for savings to be made within the delivery companies, we have proposed to return these to customers within the PC27 period. In this context, we do not understand the application of an efficiency challenge within our Alpha PPP unitary charge, which is in fact an intercompany charge. We have covered this in more detail along with the scope for efficiencies in our PPP contracts in section 4.

7.8 CUSTOMER DATA PROJECTIONS

7.8.1 As a result of the impact the COVID-19 pandemic was having on customer demand, a review of domestic and non-domestic customer forecasts was undertaken and revised customer demand projections (and revenue allocation assumptions) were submitted to the Utility Regulator in August 2020. These were used in the PC21 Draft Determination to derive price limits. We welcome this as it ensures income and subsidy projections are aligned closely with customer demand.

7.8.2 At the time of writing, we are still in the midst of the COVID-19 pandemic. The level of uncertainty continues and there is no clear evidence available to NI Water to justify further revisions to customer demand projections. We therefore

consider the forecasts used in the Draft Determination remain reasonable and appropriate.

7.8.3 Given the level of prevailing uncertainty, there remains a significant risk that any medium to long term projections prepared now will not be accurate. Indeed, the impact of COVID-19 will most likely be wider than revenue and tariffs. As a NDPB, we don't have all the usual regulatory recourse mechanisms available to other companies. It is therefore vital that there are sufficient and effective mechanisms in place to mitigate such risk and uncertainty which protects both the company and its customers.

7.9 INFLATION FORECASTS

7.9.1 We note the Office for Budget Responsibility, OBR, has recently released their November 2020 economic & fiscal outlook. This includes forecasts of RPI which are materially lower than that assumed in both our PC21 Business Plan and the Utility Regulator's Draft Determination. See table 7.2 below. In order to avoid confusion and minimise the impact of re-indexation of targets, for example, within Resource and Capital DEL projections, we would ask that the Utility Regulator take account of the lower RPI forecasts within their Final Determination.

Table 7.2 – RPI forecasts

	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Draft Determination	2.95%	2.83%	3.00%	3.00%	3.00%	3.00%	3.00%
OBR November Forecast	2.59%	1.11%	1.37%	1.82%	2.72%	3.02%	3.00%

7.9.2 As the PC21 Determination will include forecasts for Resource DEL and Capital DEL which are presented in nominal terms, the PC21 Final Determination should therefore reflect the latest inflation forecasts.

7.10 ANNEXES

Annexes related to this chapter are as follows:

- Annex 7.1 – Allowed Rate of Return PC21 (Economic Insight)
- Annex 7.2 – Revised Draft Determination Financial Model

8 MONITORING DELIVERY AND MANAGING CHANGE

SUMMARY

This chapter discusses the issues raised in monitoring delivery and managing change chapter of the Draft Determination which centre on the absence of a funded mechanism for managing unforeseen cost shocks

The extent of uncertainty going into the PC21 Final Determination is significantly heightened (relative to previous price controls), due to the combination of COVID-19 and Brexit.

It is therefore vital, now more than ever, that a funded regulatory recourse mechanism is in place to provide headroom to manage risk and unforeseen cost shocks. This is essential to ensure NI Water is financially resilient and adequately funded to finance it functions and protect services to our customers.

8.1 INTRODUCTION

8.1.1 We note the list of processes established for previous price controls to manage change and monitor company progress in delivering outputs. There are a number we regard as ineffective and have provided some commentary below.

8.2 MEMORANDUM OF UNDERSTANDING AND CONSEQUENT WRITTEN AGREEMENT

8.2.1 The Utility Regulator and the Department previously developed a Memorandum of Understanding (MoU) to set out how the regulatory regime works alongside the public expenditure regime. The Utility Regulator will be aware that section 4.1.4 - Relevant Items of the Memorandum of Understanding states:

In carrying out their functions under Article 6 of the Order, the Regulator and the Department acknowledge that mitigation measures normally available under regulation (e.g. Reserves, IDOKs) cannot be used in the initial period. The Regulator and the Department will therefore agree relevant items for which some provision, outside a determination, should be made.

8.2.2 The Consequent Written Agreement (CWA), established under the MOU, details the processes and assumptions that will apply at each price control.

8.2.3 The Draft Determination refers to the MOU and CWA as established processes to manage change. To the reader, this implies that the mechanisms are in place and are working well. We should, all of us be clear, this is not the case. The relevant items provision within the Consequent Written Agreement has not been funded since 2013/14.

8.2.4 We are firmly of the view that a funded regulatory recourse mechanism is essential to provide headroom to manage unforeseen cost shocks and uncertainty. This is essential to ensure NI Water is financially resilient and adequately funded to finance it functions.

8.3 UNCERTAINTY RELATED TO COVID-19 AND BREXIT

8.3.1 The COVID-19 crisis presents short and long-term challenges for all organisations and its impact will remain uncertain for some time. From our perspective, the key impacts since government restrictions in March 2020 have included change in customer demand, increase in non-domestic bad debt, additional costs associated with purchase of PPE and implementing social distancing and temporary suspension of the capital programme.

8.3.2 Some of this same uncertainty applies to Brexit. Less than three weeks from the end of the transition period, and it is unclear whether UK will be exiting with or without a deal and what that means for trading arrangements.

8.3.3 Other than revised customer forecasts to reflect COVID-19 change in customer demand, no other impacts have been included in our Business Plan or reflected in the Draft Determination.

8.3.4 In an ideal world, we would be able to provide an indication of the impact and have it included in the Final Determination however there are significant difficulties in assessing the impact of both COVID-19 and Brexit at this juncture which is why a funded regulatory recourse mechanism is essential.

8.4 FINANCIAL RESILIENCE

8.4.1 Draft Determination references relating to resilience focus on operational resilience. Clearly operational resilience is essential and at the heart of our business but we would urge the Utility Regulator not to lose sight of the wider aspects of resilience including financial resilience.

8.4.2 In our Business Plan, we set out the range of 'levers' that English and Welsh water companies have to mitigate the impact of cost shocks. These levers include building up cash reserves, access to large overdraft facilities, increasing their borrowing (gearing up), flexing their capital investment programme between years, moving expenditure between opex and capex, cutting dividends, equity injections, equity reductions and significantly increasing the size and scope of their commercial insurance programmes.

8.4.3 As a NDPB, these levers are ordinarily not available to NI Water. In the event that one or a number of these were to become available to NI Water, it would likely not be at the required level to make it useful.

8.4.4 The extent of uncertainty going into the PC21 Final Determination is significantly heightened (relative to previous price controls), due to the combination of COVID-19 and Brexit, as mentioned above. This is compounded in the Draft Determination by an opex efficiency challenge which pushes many of the components to a point where collectively they drive risk to

a degree which we believe to be unacceptable for the organisation and its customers.

8.4.5 It is therefore vital, now more than ever, that a funded regulatory recourse mechanism is in place to provide headroom to manage risk and unforeseen cost shocks. This is essential to ensure NI Water is financially resilient and adequately funded to finance it functions and protect services to our customers.

8.5 MID-TERM REVIEW

8.5.1 We note intention for mid-term review and dates for engagement and submissions.

9 NEXT STEPS

9.1 NI Water has submitted this response on 16 December 2020 in accordance with the Draft Determination timescales.

9.2 In our response, we have raised a number of concerns in respect of the Draft Determination. We appreciate that in considering our response, the Utility Regulator may wish to seek further clarification. NI Water would wish to assure the Utility Regulator that we will be happy to engage further to provide further clarification.

9.3 It is our expectation that the Utility Regulator will issue a Final Determination on 16 March 2021.

9.4 NI Water will carefully consider the Final Determination and give the Company decision to the Utility Regulator no later than 11 May 2021.