United Utilities Water

UUW response to PR24 Draft Methodology

September 2022

United Utilities

Water for the North West

2. Regulating through the price review

Q2.1 Do you agree with the challenges facing the sector and the ambitions for PR24 we have identified?

Response: *Strongly Agree / Agree /* ***Neither agree nor disagree*** */ Disagree? / Strongly disagree*

We broadly agree with the list of key challenges identified by Ofwat and its ambitions for the price review. It is essential that AMP8 enables better service delivery and significant environmental improvements in the face of significant carbon, climate and affordability challenges. We do however, disagree with:

* Ofwat's characterisation of the some of the key environmental issues facing the sector; and
* the manner in which Ofwat has chosen to address some of those key challenges

The key challenges, in particular performance on overflows and carbon reductions, are largely presented as matters of ongoing company compliance (that would largely be delivered from company base costs). However, we consider that these are newly identified improvements in services that require additional expenditure. This will need to be supported through the price control process.

We fully recognise the difficulties faced by customers that are struggling to balance household budgets during a challenging cost of living crisis. Furthermore, we are fully prepared to propose an ambitious plan that only seeks to pass to customers the necessary and efficient cost of meeting the improvements in service that are expected of us, principally through statutory and regulatory targets. We will further improve services to customers as far and as quickly as we are able to. However, it would be unreasonable for Ofwat to assume that the consequences of decisions made by government and quality regulators (which are manifestly outside of the control of companies) can be absorbed into base costs or otherwise passed on wholly to shareholders. The price review exists to ensure that companies are able to finance their functions - including delivery of new statutory and regulatory targets – and this requires that these requirements are properly reflected in allowed revenue.

We respond to the specific issues in the respective questions below.

Q2.2 Do you agree that continuing to use our three building blocks helps push companies to meet our ambitions for PR24? (Please provide detailed comments on specific building blocks to the relevant chapters.)

Response: *Strongly Agree /* ***Agree*** */ Neither agree nor disagree / Disagree / Strongly disagree*

We agree that Ofwat's three building blocks of risk and return, cost assessment and outcomes remains valid and appropriate for PR24.

However, given the scale of changes to the price control process over the last three periodic reviews, we urge Ofwat to deliver greater levels of stability and consistency in its regulatory approach. For example, we are fully supportive of the outcomes regime, its potential and its realised benefits to date. However, the scale of change between periods (for example the proposed significant change in the number of expected bespoke performance commitments, and Ofwat's proposals to significantly change the expectation of what service improvements are to be delivered from base costs) is not supportive of effective long term planning and raises significant transitional risks between PR19 and PR24. We recognise that Ofwat has identified the need for greater future stability in outcomes and in the long term framework beyond PR24 - which we welcome, alongside the greater emphasis on long term delivery strategies.

Q2.3 Do you agree that we have struck the right balance between what's in and what's outside of the price control?

Response: *Strongly Agree / Agree /* ***Neither agree nor disagree*** */ Disagree / Strongly disagree*

In general we agree with Ofwat's approach, other than for developer services. In this case, we are strongly advocating that all onsite work be outside of the price control, and all offsite work (in particular including all investment requirements to meet nutrient neutrality targets) and offsite benefits (e.g. environmental incentives) should be within the single-till network plus price controls.

Q2.4 Do you have any comments on our approach to evaluating progress? What specific evaluation questions (based within the four key ambitions) do you think an evaluation should look to answer?

Response: *Strongly Agree /* ***Agree*** */ Neither agree nor disagree / Disagree / Strongly disagree*

We have no objections to Ofwat's four key ambitions, and for it to evaluate progress against those ambitions.

3. Design and implementation of price controls

Q3.1 Do you agree that in our final methodology we should commit to introducing either an adapted water trading incentive or a new water trading incentive at PR29? If you have a preferred approach, please provide reasons, including any thoughts on how the options we set out in Appendix 2 could be improved.

Response: *Strongly Agree / Agree /* ***Neither agree nor disagree*** */ Disagree / Strongly disagree*

We agree that water trading incentives need to be overhauled, but disagree with the specific proposals for AMP8.

Incentives need to be improved for both buyers and sellers, in contrast to Ofwat's proposal to only increase incentives for buyers at PR24. Whilst we agree that incentives for buyers need to be improved (in particular to offset concerns about relying on supplies that are not wholly within the company's control) we also believe that incentives for sellers also need to be improved.

In particular, buyers should naturally be incentivised to purchase water from other incumbents where this is more efficient that the next most efficient in-house options. However, the expectations on sellers need to be relaxed in order for sellers to be willing to identify and promote options. In particular:

- Bulk supply pricing rules need to be updated to ensure that it is clear that sellers are able to charge a price (beyond cost reflectivity) that enables recovery of its intended water trading incentives.
- Also, where Ofwat sets the same very challenging efficiency expectations on the water supply projects proposed by sellers (regardless of whether they are used for trading or supplying customers within region), this will strongly disincentivise participation. It is also inconsistent with how Ofwat would treat a water supply from a third party, whereby Ofwat would not seek to impose a stringent additional cost challenge for a project that that had been agreed by two parties on a commercial basis. In order to encourage participation, and therefore realise greater benefits from trading, a modified approach to efficiency expectations for sellers should be adopted which does not overly target efficiency at the risk of reducing identification of availability. Such an approach would not prevent customers from realising the vast majority of benefits from any individual trade and will enable customers to benefit from a greater number of trades overall.

Q3.2 Do you agree with our proposals to:

a) Continue to include network reinforcement in the network plus price controls?

b) Remove wastewater site-specific developer services from the wholesale wastewater network plus price control

Response: *Strongly Agree /* ***Agree*** */ Neither agree nor disagree / Disagree / Strongly disagree*

We are supportive of the general direction of the proposals to maintain network reinforcement in the network plus price controls, and remove wastewater site-specific developer services from the wholesale wastewater network plus price control, albeit we have some related concerns.

First of all, it should be clearer which activities (and associated charges and company costs) will remain within the network plus price controls, and which will be moved outside of price control. In particular, in respect of administrative and application fees, our assumption is that these need to would form part of the on-site work that is taken outside of the price control.

We understand that there are a number of enablers that will be required to facilitate this transition such as removal of the ability to pay income offset, environmental incentives and cost reflectivity. Developers will experience further cost pressures from nutrient neutrality requirements. Therefore we strongly suggest that transitional arrangements for the removal of income offset are applied in AMP8 which will help avoid significant cost shock to developer customers.

As articulated in our response to Ofwat's consultation on the scope and balance of developer charging and incentives, customers in United Utilities' region will be disproportionally affected by the removal of income offset. We are considering ways to begin transition within AMP7 to reduce the income offset; however we still need to comply with the balance of charges rule during this period. An overnight removal of income offset will have an immediate impact on connection costs from 2025 but will also have a longer term effect on SLP/developer customers who have adoption agreements with income offset payments included within the schedule - that will continue to run into AMP8. The most acute impact could be on SLPs that have not treated the income offset as a pass-through cost to a developer and would need to absorb any loss. We have spoken to SLPs operating in our region and they have told us that the developers have benefited from the income offset but the SLP has no commercial protection for current contracts should it be reduced or removed. A cliff edge removal would leave them out of pocket for any new connections on exiting sites from 2025. We propose a transitional period within AMP8 for existing agreements alongside a predictable and fair reduction of income offset for smaller developer customers.

We disagree that environmental incentives should sit outside of the network plus price controls. Network plus is the sole beneficiary of sustainable development; incentives should therefore sit within these controls. Setting incentives wholly within developer services does not align with the principles of cost reflectivity as it would disrupt contestable and non-contestable charges and presents a risk of negative impacts on the competitive self-lay market. Incentives should be offered through (or alongside) the infrastructure charge which links directly to network reinforcement benefits.

Q3.3 Do you agree that the inclusion of network reinforcement in cost sharing would be enough to manage uncertainty around the volume and mix of network reinforcement work to be delivered?

Response: *Strongly Agree / Agree / Neither agree nor disagree /* ***Disagree*** */ Strongly disagree*

We believe that additional correction mechanisms to manage uncertainty in network reinforcement costs may be needed. The last few years have demonstrated how highly unpredictable growth can be, even in the short term. This uncertainty is likely to continue for the foreseeable future, with conflicting pressures including government growth aspirations, economic volatility, and constrained supply chains creating a highly unpredictable future. The main purpose of the cost sharing mechanism is to address cost efficiency, rather than volume risk – this is one of the reasons why mechanisms to manage volume risk had been introduced within developer services. It would seem inconsistent for onsite developer work to accommodate volume risk, but not for offsite developer costs. Therefore, relying only on cost sharing mechanisms is unlikely to be an adequate response.

Q3.4 For water site-specific developer services:

a) Do you agree with our proposal to exclude new developments of more than 25 properties from the wholesale water network plus price control at PR24, but with transitional arrangements for companies with low levels of competition?

b) Do you think that new developments of 25 properties and fewer should remain in the wholesale water network plus control or be removed? If they were removed from the price control, what alternative protections could we introduce to protect new connection customers from monopoly power?

Response: *Strongly Agree / Agree / Neither agree nor disagree /* ***Disagree*** */ Strongly disagree*

We are supportive of the proposed approach, but consider that (with some protections) all onsite work should be removed from the price control, and not to take a different approach for developments smaller/larger than 25 properties. We agree that small developments are likely to require additional protections as there is evidence that some are less able to access competitive markets; however we are concerned that the proposed approach is unlikely to deliver the desired protection, whilst risking undermining the continued development of a competitive market for large developers. We believe it will be feasible for all onsite activity to be taken outside of the price control.

Definition of small development

In reviewing Table 3.2: Percentage of new properties connected by self-lay providers by development size in 2020-21 (all financially closed new developments that require new requisition mains) in Appendix 3 of Ofwat's PR24 draft methodology, it appears that there is active competition in the 11-25 property range in some company regions, suggesting that low levels of competition in other regions are driven by company specific issues rather than fundamental market concerns.

However, we recognise there remains a need to protect the very smallest 1-10 connection developments. We are taking steps to help facilitate the increase by allowing SLPs to make connections to existing mains where there is no adoption agreement. We believe that with cost reflective charging arrangements and the ability for accredited SLPs to make connections where there is no adoption agreement, then customers should be protected from monopoly power.

An alternative approach

We consider that if Ofwat was to continue with the current review and challenge of wholesaler developer services charges, but with an enhanced focus on ensuring incumbent cost reflectivity in charging for small developments (e.g. by setting a price limit, which could be set relative to prices for larger developments), this would result in adequate protections for small developments.

If a specific 'price cap' for small developments were to be used we believe it will need to be a set sufficiently to ensure companies remain able to comply with cost recovery principles.

Q3.5 Do you agree with our proposals:

a) To raise the size threshold above which companies should deliver schemes through DPC to around £200m lifetime totex?

b) For companies to deliver schemes through DPC by default above this threshold?

Response: *Strongly Agree* / ***Agree*** / *Neither agree nor disagree* / *Disagree* / *Strongly disagree*

a) We agree with Ofwat's proposal to raise the DPC size threshold to around £200m lifetime totex to align with market appetite. Given the costs of tendering (which although likely to be lower in future than for pathfinder projects, could still be relatively large), it seems sensible to raise the threshold alongside standardising DPC arrangements, to support the achievement of value for money for customers.

b) We support Ofwat's aim to improve value for customers and the environment from major project investment, including through the use of DPC. We consider that in order for "DPC by default" to be workable for all parties above the size threshold, it is important that the DPC framework is well-specified and that the expected processes and regulatory interfaces are clearly established in order to avoid delaying delivery of DPC solutions for customers. We consider that DPC remains in its infancy, with only one such project currently out for tender and a small number of other projects being progressed in AMP7. There is a risk of overestimating the capacity of both appointees and regulators to satisfactorily deliver "DPC by default" across a wide range of schemes.

It will be important to provide a clear definition of separability through Ofwat's revised technical guidance. Further, whilst the removal of value for money (VfM) from the DPC eligibility criteria ensures that DPC will be thoroughly tested as an approach, a project that shows negative VfM at the pre-tender stage may undermine bidder confidence in the likelihood of award, weakening the competitive tender and increasing the likelihood of abortive costs. Ofwat guidance in this area (as well as more widely around DPC) may be beneficial in supporting successful procurement processes. Furthermore, given the likelihood of a larger number of projects being delivered through DPC than under the "do minimum" option, it will be essential for the DPC process to be as efficient as possible for all parties and for Ofwat to be well-positioned to support the process in a timely way.

Separately, we note that developing and awarding a DPC contract entails significant costs for the appointee. These were underestimated at PR19 and facilitating recovery of efficiently incurred costs will require higher allowances for these costs at PR24. Further, the ongoing cost of managing a DPC contract also needs to be clearly taken account of in future price reviews. Even where projects are separable, management of the contractor and integration of the DPC project with existing appointed activities can present significant and complex administrative challenges.

Q3.6 Do you have any views on any other aspect of our proposals in relation to:

- **a) The design of price controls;**
- **b) Water resources;**
- **c) Developer services;**
- **d) Retail activities;**
- **e) Bioresources;**
- **f) Other controls;**
- **g) The revenue forecasting incentive mechanism; or**
- **h) Direct procurement for customers?**

Response: *Strongly Agree / Agree /* ***Neither agree nor disagree*** */ Disagree / Strongly disagree*

d) Retail

We consider that Ofwat's approach to retail, as a "nominal price control" may not be resilient to the high inflation environment currently facing the economy. Whilst companies are able to make individual representations on this, we suggest that Ofwat considers applying a more standard common approach for all companies to better reflect that inflationary price pressures will impact companies' efficient cost to serve over AMP8.

e) Bioresources

We will respond separately to Ofwat's parallel Bioresources consultation. However, we do note that Ofwat's direction of travel (revenue benchmarking and increased dilution of its commitment to legacy RCV) seems at odds with the medium term pressures facing the Bioresources sector, and the risk that significant new investment may be required to make significant changes to how Bioresources services are provided. It is not clear from Ofwat's draft proposals how its approach to Bioresources is taking adequate account of these risks.

g) Revenue forecasting incentive

Consistent with our engagement on DPC, it is essential that the RFI mechanism is updated and amended to make explicit reference to the treatment of DPC allowed revenue. If not, the current RFI wording does not adequately recognise DPC allowed revenues, and may therefore (inadvertently) not recognise it as a legitimate revenue to be recovered from customers. The action of the RFI would then (incorrectly) pass DPC allowed revenue back to customers, as it would not have been included in the company's price control. It is important that the RFI be re-drafted, to ensure there is confidence in the coherence of the DPC process and how it interacts with the price controls.

h) Direct procurement for customers

The forthcoming DPC guidance document will be critical in determining the success of future DPC projects, particularly in achieving the degree of standardisation necessary to support the achievement of value for money (VfM) for a wide range of schemes. It will be important for future DPC guidance to reflect experience from existing DPC projects to generate best value propositions that work for customers, companies, investors and contractors alike. While every DPC project will be slightly different, experience from pathfinder projects may provide insight on how different types of contractual features map to the Allowed Revenue Direction and cost recovery arrangements.

4. Reflecting an understanding of customers and communities

Q4.1 Do you agree with our approach to making sure that companies' price review submissions and our determinations reflect an understanding of customers', communities' and environmental concerns?

Response: *Strongly Agree / **Agree** / Neither agree nor disagree / Disagree / Strongly disagree*

United Utilities agrees with the approach to ensure determinations reflect an understanding of customers', communities' and environmental concerns. In particular the ongoing collaborative ODI rates research results is likely to offer a good insight into customers' stated preferences in this area in a way which is consistent across different companies' operating areas. We also agree that it is important that company led research is of a high quality, and can demonstrate it has been through a process of robust challenge and assurance.

It is important that Ofwat provides early detail on collaborative research results and the methodologies used to calculate incentive rates. If companies are to have a meaningful opportunity to review and comment on indicative incentive rates, and potentially use compatible methodologies in assessing bespoke Performance Commitment incentive rates, we will need to understand the methodologies as soon as possible.

We note concerns about companies generating alternative incentive rate valuation research. We do recognise that research which is consistent across different company regions has additional value, and the robust challenge and review process that the Collaborative Incentive Rate research has been through can give added confidence in the results generated. However we believe it is an important principle that all relevant research into customers' views is fully and fairly considered by all key stakeholders, including Ofwat when determining final customer valuations and incentive rates.

Q4.2 Do you agree with our proposal to conduct open challenge sessions?

Response: *Strongly Agree / **Agree** / Neither agree nor disagree / Disagree / Strongly disagree*

We agree with the importance of gaining views from communities and stakeholders, and support the concept of open challenge sessions as a way to gaining this feedback.

We are keen to understand further, what type of representatives would be invited, how this would be publicised and how the session would be run.

For example we are keen to understand more on questions such as:

- The extent to which companies will be invited to develop views on these sessions' objectives, structure and timings.
- How will the audience be defined? For example, whether the expectation is to have sessions with a mix of stakeholders, community representatives and customers; or to have sessions targeted at each group separately?
- Whether guidance on timings of these sessions will be provided. We think it will be likely that significant time will be needed to prepare the presentation materials which are clear and accessible to a wide audience, and cover the full range of business plan proposals.

Q4.3 Do you have views on open challenge sessions can align with the collaborative approach in Wales?

Response: *Strongly Agree / Agree / **Neither agree nor disagree** / Disagree / Strongly disagree*

We await the results of this collaborative exercise, and hope that there is an opportunity for companies operating in England to benefit from some learnings for the longer term.

As part of the collaborative approach in Wales, we understand an open forum has been planned. We note that the audience and promotion of this forum will need to be carefully considered to reduce any duplication/ overlap with the open sessions. This is to ensure the open sessions remain comparable across companies.

Q4.4 Do you have views on how the outcome of collaborative customer research can contribute in the context of the collaborative approach in Wales?

Response: *Strongly Agree / Agree / **Neither agree nor disagree** / Disagree / Strongly disagree*

We are providing no feedback on this question.

5. Delivering outcomes for customers

Q5.1 Do you agree with our proposed package of common performance commitments? Is water demand best incentivised through separate performance commitments on business and household consumption and leakage or through a performance commitment measuring total demand?

Response: *Strongly Agree / Agree / Neither agree nor disagree /* ***Disagree*** */ Strongly disagree*

We consider that there are certain areas of the proposed package of common PCs which could be improved upon to the benefit of customers and companies. We welcome Ofwat's approach in proposing a package of common PCs which aims to encompass the core activities of a water company. However we consider that there are certain proposals in areas such as asset health and biodiversity, for example, which can be improved upon for the final PR24 methodology. We highlight such suggested improvements in response to Ofwat's targeted questions below. In addition to these specific responses, we also make comment and propose amendments on storm overflows, WINEP, void billing incentives and Bioresources performance incentivisation.

Wastewater

We strongly disagree with Ofwat's proposed approach to storm overflows, particularly for AMP7, which Ofwat proposes to focus on average number of spills per overflow. We consider that the common measure should focus on the adverse impact from storm overflows, rather than merely count the amount of overflows and number of spills. We see Ofwat's proposals on storm overflows (in terms of merely counting the amount and ignoring the severity) to be inconsistent with the current permitting regime. It also does not recognise the significant differences between companies with different operating environments, and hence with significant different investment requirements to meet Defra's revised approach to targeting spills.

A simplistic assumption that an equivalent spill frequency is achievable by all companies from the start of AMP7, based on existing permit framework and historic base costs is not reasonable or grounded in evidence. It also pre-empts a significant proportion of the necessary investment required by companies to meet Defra's revised approach to targeting spills, and assumes (in contrast to Defra) that this should already have been delivered from base costs. We develop these points further in response to questions 6.6 and 6.7.

Ofwat's draft proposal on storm overflows is not a useful metric of overflow performance and does not target river improvements, which should be central to any such measure on storm overflows. Time should be taken to develop a measure of adverse impact and incentivise improvements that achieve good value for money. We maintain that improvements which merely target the quantum of spill frequency alone are an ineffective use of customer money.

<u>WINEP</u>

Ofwat's draft proposals make reference to future considerations on whether any common PCs may be required to support a more outcomes based approach to the WINEP. Whilst Ofwat proposes to work with the EA on testing this approach, we would also request that Ofwat is mindful of our bespoke PC development timeline. We assume that if common PCs aren't established by Ofwat for WINEP, then companies must develop their own bespoke PCs or PCDs relating to this programme of work. There is an early submission for bespoke PC definitions in April 2023, so companies will need to know well in advance of this whether or not they need to develop bespoke PCs or PCDs for WINEP.

<u>Household void billing incentive</u>

We propose that the inclusion of a common incentive for household void billing be reconsidered. As noted, it is in customers' interests for water companies to have accurate records of occupied properties and bill them correctly. This helps to reduce average bills across all customers. However some properties are complex to bill, and there can be considerable cost in sourcing occupier contact details. In addition some properties carry increased bad debt risk. Companies should have a reasonable prospect of recovering these increased marginal costs of billing hard to reach customers.

Whilst Ofwat will continue to retain some alternative policy tools to promote accurate billing, evidence from previous price control periods indicates that these tools are less effective than an active incentive mechanism, such as a common Performance Commitment or other efficient billing incentive.

Non-Household void billing incentive

We propose that decisions on appropriate non-household void billing incentives be considered in the light of upcoming findings from MOSL led collaborative work in this area. Historically retailers in the non-household retail market have not always actively sought to bill all occupied properties. In recent years a number of steps have been taken by MOSL and wholesalers to help address this challenge, and the effectiveness of these interventions is being reviewed, with proposals to help manage non-household voids being developed. If the findings of this work identifies the need to introduce a common incentive then we would encourage Ofwat to enable the delivery of such an incentive within the Price Control framework.

Bioresources

We would welcome confirmation from Ofwat as to whether it expects Bioresources to be included only in the common PC for operational GHG, and not in any other common PCs.

In the absence of any bespoke PC, we note that Bioresources may require enhancement investment resulting from WINEP and/or other sources. We strongly suggest that Ofwat takes a common approach to applying (say) PCDs for such requirements across the industry, to help ensure there is a level playing field in this developing market.

Whilst we more fully respond below to Ofwat's specific question on separating the operational GHG common PC between Water and Wastewater, we disagree with Ofwat's proposals for biogas for electricity displacement and how this is considered in the GHG PC. We consider that using biogas for electricity displacement is a worse carbon environmental outcome than using biogas to decarbonise heat and transport. This is because the carbon footprint of bought electricity is lower (and getting even lower) than biogas (i.e. they are not equivalent). We consider that it would be perverse to incentivise one use of biogas over another through the PC as that could distort the market.

Carbon is a company level commitment and as such should be retained by the Network Plus part of the organisation. The costs for carbon reduction by Bioresources could be managed via transfer pricing arrangements (similar to liquor recharges). If there is a value for carbon it should be reflected in the movement between price controls. Unless that is the case we would be effectively incentivised to restrict the Bioresources market and skew the investment needed to reduce carbon emissions - compared to the market for waste anaerobic digestion. The latter has the 2050 obligation (not a 2030 commitment) for net zero and is therefore not being incentivised in the same timescales, and therefore will have a cost (and hence price) advantage.

Water demand incentive

We believe that water demand can be effectively incentivised through either separate performance commitments or a combined measure, however the design and calibration of these measures is crucial if the desired outcomes are to be realised.

- If separate leakage, PCC, and Non household demand measures are used it is essential that demand reduction incentive rates for each litre of water saved are equalised across the measures. This is necessary to ensure that that companies pursue the lowest cost demand reduction options without being overly constrained by artificially different incentive rates.

- Performance targets should be based on commitments set out in water resource management plans ensuring that each company's targets are appropriate for the regional context, and take into account the complex interactions with the wider supply demand balance. Given different levels of past enhancement investment, rates of household metering and regional water stress status it is important that demand reduction targets be based on each companies' past performance and future plans, not normalised common targets.

Q5.2 Do you agree with our proposed guidance for bespoke performance commitments?

Response: *Strongly Agree / Agree / Neither agree nor disagree / **Disagree** / Strongly disagree*

Rather than Ofwat's proposed limit of no more than 2-3 bespoke performance commitments, we suggest that a WaSC, with considerably more complex and greater variety of operations than a WoC, will justifiably require more bespoke PCs than a WoC. We therefore suggest that any restriction on the number of bespoke PCs should be per service, not per company and that the number of bespoke PCs for WaSCs should be twice the number for a WoC.

We also strongly suggest that companies are not discouraged from identifying and proposing additional bespoke PCs, particularly if those additional measures help to better support effective customer protection.

We are concerned that the narrow scope of bespoke measures could hinder companies in proposing sufficiently innovative and ambitious plans at PR24. As noted in our earlier consultation responses (e.g. Nov 2021 "PR24 and beyond - Performance commitments for future Price Reviews") we consider that bespoke PCs can play a pivotal role in developing future common PCs. A company can trial a performance commitment one AMP which can then be extended to all companies the following AMP as a common PC, building on any learning points from that initial solo-company trial in the preceding AMP. Ofwat's proposed bespoke PC guidance would not permit such innovation for a financially incentivised bespoke PC.

We consider that price control deliverables (PCDs) could, in some circumstances, offer a useful alternative approach. However, the current proposed approach - with PCDs serving only as a vehicle to pay monies back to customers for undelivered outputs – is too restrictive. For many areas, a symmetric approach (or even a zero based positive PCD) may be far more appropriate. Whilst Ofwat may have a preference for its proposed approach, we strongly suggest that companies are not prevented from making alternative proposals for PCDs, which may be in the best interest of customers.

We consider that the scope of PR24 PCDs should be expanded to also offer the possibility of a form of contingent cost allowance (e.g. in response to an adaptive planning trigger condition being met). The rules for PR24 and company business plans are being formulated during a time of unprecedented uncertainty. Significant regulatory decisions are pending which could have a significant impact on company investment requirements. There are also requirements which will crop up during AMP8 which cannot be determined upon with sufficient certainty and baked into company revenue requirements and customer bills. We propose that a form of contingent PCD should be permitted within the PR24 framework, and for company proposals in this area not being deemed non-compliant with business plan guidance.

Q5.3 Do you agree with our proposed approach to setting standard rates?

Response: *Strongly Agree / **Agree** / Neither agree nor disagree / Disagree / Strongly disagree*

We are generally supportive of the proposed approach. We agree that taking account of the value to customers of each aspect of service is a key principle, and that consistency between companies is generally desirable.

We agree that the principle of symmetrical reward and penalty rates is sensible, and will help ensure that the better performing companies have adequate incentives to continue to improve. Whilst we understand the need for a degree of incentive rate calibration in the light of company determinations we would caution that such adjustments should not be applied lightly, as moving away from direct, evidence-based customer valuations could be perceived as undermining the legitimacy of future Performance Commitment rewards and penalties.

However we disagree with how Ofwat proposes to set the benefit sharing factor and consider that Ofwat's current approach would appear to slightly reduce company incentives to improve performance. We expand on this in our response to question 5.5.

It is important to note that triangulation of customer valuation survey results and other evidence on customers' views is complex, and companies should have an opportunity to comment and provide additional evidence into the process. In particular we believe that whilst commonality of survey results has some benefits it is a matter of principle that all evidence on customers' views should be considered fairly and openly, and that where legitimate differences in regional customer valuations are identified that companies should be able to present evidence to support this in their business plans.

Q5.4 Do you agree with our proposed approach to the measures of experience performance commitments, including to increase the size of C-MeX?

Response: *Strongly Agree* / ***Agree*** / *Neither agree nor disagree* / *Disagree* / *Strongly disagree*

We understand why it might be appropriate to increase C-MeX incentive rates, recognising that to do so will restore incentive strength to previous levels. It would however be desirable to develop some collective evidence on customer valuations for improved customer service, to help in calibrating incentive rates against other common Performance Commitments and across the MeX suite.

We have provided further thoughts on the design and operation of C-MeX in response to questions 12.1 and 12.2 below.

We believe that D-MeX should not simply be carried forward, as there are good grounds for believing that the current measure could be improved. For example the quantitative aspects of D-MeX no longer appear to be materially differentiating between companies' service performance. As greater clarity on how D-MeX interacts with new price control design proposals in the area of developer services we believe there is merit in revisiting the design of this metric.

We have put forward a number of thoughts on the possible design of BR-MeX in response to question 12.3 below.

Q5.5 Do you agree with our proposed approach to estimating marginal benefits for common and bespoke performance commitments?

Response: *Strongly Agree* / ***Agree*** / *Neither agree nor disagree* / *Disagree* / *Strongly disagree*

Whilst we agree with principle of using marginal benefit as the basis for setting incentive rates, we do not fully agree with Ofwat's proposal for a seemingly arbitrary uplift to totex sharing rates in order to calculate the benefit sharing factor. At PR19 we proposed to use the assumed totex sharing rate of 50% as our benefit sharing factor and stated that if our totex sharing rate was anything other than 50% then we would propose to update the benefit sharing factor to reflect this. Ofwat proposes that the ODI incentive rate (for most, but not all, common PCs) should be based on marginal benefit (which we agree with) multiplied by a benefit sharing factor based on the company's totex sharing rate (example given assumes it to be 60% - i.e. Ofwat assumes the company to be "Inadequate") plus an arbitrary 10% = 70% benefit sharing factor.

The driving force for this appears to be the desire to set stronger incentives on companies. However, adding an arbitrary 10% distorts the incentives from the outset. It divorces the ODI incentive regime from the totex incentive regime in a Price Review process in which Ofwat sets these two at the heart of its business plan assessment.

By the final methodology, Ofwat should set out a clear framework for how it will decide when it would be appropriate to apply a benefit sharing factor which varies from the norm (i.e. different from the totex sharing rate). Should Ofwat then decide to apply a benefit sharing factor which differs from the totex sharing rate, Ofwat can apply this predetermined framework to support how it has made the decision. This would be consistent with the recommendations made by SIA Partners in their review of PR19 triangulation, which called for the creation of a new good practice triangulation framework ahead of PR24.

Q5.6 Do you agree with our proposed approach to incentivising asset health performance?

Response: *Strongly Agree / Agree /* ***Neither agree nor disagree*** */ Disagree / Strongly disagree*

We welcome Ofwat's proposed approach to asset health and are broadly supportive of the proposed approach to incentivising performance in this area, which follows on from its recent consultation and industry engagement on the matter. We also support the availability of both under- and out-performance payments for all three asset health performance commitments. However we do not agree with asymmetric caps and collars for individual asset health-related performance commitments. We consider that symmetrical caps and collars would be more appropriate, and in line with Ofwat's approach to all other PR24 caps and collars.

We welcome the engagement that Ofwat has had with the industry on this complex area leading up to its draft methodology proposals. Our responses to these consultations and discussion papers are available on Ofwat's website; accordingly we do not seek to repeat here all of the points we have previously made. Instead, we wish to emphasise the most pressing outstanding points to address which we consider will improve Ofwat's PR24 proposals for the regulation of asset health.

Whilst we welcome many of Ofwat's proposals we disagree with the rejection of excluding company-identified mains repairs from the mains repairs performance commitment. Ofwat highlights that consistency is lacking across the industry at present for the differentiation between customer and company identified mains repairs. Ofwat has now established an Operational Resilience industry working group which can be utilised to develop robust guidance in this area, and consistency in reporting as has previously been achieved for the equivalent sewer collapse performance commitment which excludes company detected incidents as noted in Appendix 7 of the PR24 draft methodology "Performance commitment definitions" p.143: "The following exclusions apply: • Proactively identified collapses – Should the need to replace or repair a pipe be found as a result of proactive activity (survey or proactive sewer maintenance work) on the network then it should be excluded (see flow diagram above).".

We also continue to promote the use of a sewer blockages common performance commitment for PR24. Ofwat does not share our view of the evidence and considers that this area of performance will be sufficiently incentivised through the common PCs on sewer flooding and pollution incidents. Whilst we accept that a proportion of sewer blockages will inevitably lead to the generation of some flooding or pollution incidents, we do not support the premise that this negates the need for a common measure on this topic. For example, analysis of our 2020/21 data shows that approximately 75% of our blockage incidents did not result in a further flooding or pollution incident. We consider that this measure, when coupled with the existing sewer collapses common metric, is an important indicator of customer experience/service and asset health. In certain instances, sewer blockages can also be used as a reflection of customer behaviour and awareness of company campaigns. This measure was on Ofwat's asset health long list at PR19, meaning an effective common methodology is already in place. Therefore, we consider that the transition to a common measure would be a relatively simple move for the sector.

We suggest that the target for the unplanned outage performance commitment could be strengthened by clarifying that raw water quality issues will not count towards company unplanned outage performance. We consider that the rules and exclusions which are currently in place should remain in place. A detriment to raw water quality is not an "outage" from an asset health perspective – the health of the assets has not changed nor been impaired. Including this in the PC definition is therefore not appropriate and the exclusion remains a sensible one to maintain. To include raw water quality – rather than continue to exclude it from the PC – would also be against the thrust of performance commitments as raw water quality events are outside of management control and unfairly biases against surface water-dominated companies who operate a flexible system, switching between sources when such a raw water event occurs.

We disagree with the use of asymmetric caps and collars for individual asset health-related performance commitments. We consider that symmetry would be more reasonable, at +/-0.5% RoRE for the three asset health PCs. The level at which diminishing marginal benefits associated with very high outperformance would hit is, in our view, somewhere well above the +0.5% level. Whilst we recognise Ofwat's concerns regarding incentivizing asset health improvements directly leading to incentivising both the health improvement and any resultant service improvement, we note that targets have been tightened every AMP, therefore improved performance only realised in following AMPs is unlikely to be financially incentivised as the targets in subsequent AMPs are tightened. Asset health PCs should therefore be treated like any other PC with symmetrical caps and collars. The application of symmetrical returns is a valuable mechanism to support the industry in improving long term asset health; conversely, asymmetric caps and collars may limit company ambitions.

Q5.7 Do you agree with our proposal to retain, expand and streamline enhanced incentives?

Response: *Strongly Agree / **Agree** / Neither agree nor disagree / Disagree / Strongly disagree*

We welcome the proposal to only apply enhanced outperformance ODI rates – such a positive approach shows that Ofwat is focused on trying to incentivise the industry to improve its performance and stretch the frontier of great performance.

However the effort required to set an enhanced ODI regime is only worth it if the resultant ODI rates are set at realistic levels. Anything too unconnected to realistic, but obviously stretching, performance levels will not incentivise companies but will take a lot of regulatory time and effort to set, but to no avail in actually creating stretching performance in AMP8.

As can be seen by the first two years of AMP7, only one company has been able to access enhanced ODI rates once, in 2021/22. All other companies remained some distance away from triggering their enhanced thresholds. This provides some evidence that for AMP7 the rates have not been set in the manner which Ofwat sought, (i.e. stretching but possible).

Q5.8 Do you agree with our proposed approach to selecting performance commitments for enhanced incentives?

Response: *Strongly Agree / **Agree** / Neither agree nor disagree / Disagree / Strongly disagree*

Yes, we agree that enhanced incentives should only be possible when there is a robust data set to accompany the setting of the targets. However, we also believe that they could be extended beyond the already established common PCs and to some of the newer common PCs for AMP8. Quite a few of these have been reported on by the majority of companies under the guise of their company bespoke measures for AMP7, so whilst not strictly "common" PCs for AMP7, the data set is widely reported on to a fairly common, and therefore robust, standard.

It is particularly important, however, that enhanced incentives are provided where there is a reasonable and realistic opportunity for all companies to achieve them. For example, in the case of internal sewer flooding, we do not believe that Ofwat's previous approach to setting common targets leads to equally achievable targets for each company (unreasonably challenging for some companies, but likely too easy for other companies given their particular circumstances). In such cases, enhanced incentives should not be offered where there is a risk that the approach to setting PCLs may lead to targets that have such varied levels of challenge between companies.

Q5.9 Do you agree with our proposed approach to setting enhanced thresholds, rates and caps?

Response: *Strongly Agree / Agree / **Neither agree nor disagree** / Disagree / Strongly disagree*

As described in our response to Q 5.7 above, we believe that enhanced ODIs should be set at a more achievable level than has been used for PR19 in order to be stretching but attainable.

We consider that the enhanced rate (of double the standard rate) is set at a suitably incentivising level. We agree with the removal of enhanced caps as an aggregate sharing mechanism should offer sufficient protection to customers.

Q5.10 Do you agree with our proposed approach to knowledge sharing?

Response: *Strongly Agree / **Agree** / Neither agree nor disagree / Disagree / Strongly disagree*

We agree with the approach to knowledge sharing once a company has demonstrated a sustained period of strong performance and particularly where a company has received a reasonable duration of benefit from this improved performance (e.g. one AMP). This would appropriately balance the need to ensure companies recognise that they can benefit from financial incentives for strong performance with the broader interests of customers who are not directly served by the company.

We note that whilst knowledge sharing has been increasing, levels of knowledge sharing are low. We believe that it might be appropriate to make enhanced outcome incentive rewards conditional on tangible evidence of knowledge sharing with the rest of the industry. Again, this will only act as an effective incentive if enhanced outcome incentive rewards are within reach of the best industry performers; outcome incentive rewards which are pitched at unattainable levels of performance are unlikely to be an effective incentive.

Q5.11 Do you agree with our proposal to set caps and collars on a targeted basis, and apply a two-sided aggregate sharing mechanism to all companies?

Response: *Strongly Agree / Agree / **Neither agree nor disagree** / Disagree / Strongly disagree*

We agree that caps and collars should remain in place for those PCs where robust historical data sets do not exist. Similar to our response on enhanced rates, we consider that robust data sets extend beyond the common PCs for which Ofwat has identified they have the confidence to remove caps and collars. We consider that operational GHG emissions common PC is already reported on in the method proposed by Ofwat and therefore could have no cap and collar. Per our response to Q5.6, we believe that cap/collar levels for asset health common PCs should be symmetric. Symmetric cap/collars are fairer and should be set for these asset health PCs with a rate which is in line with all other caps/collars, i.e. +/-0.5%. Symmetrical cap/collars will better incentivise companies to improve asset health, where possible. Even at this higher level, diminishing returns will not be an issue.

We agree that an aggregate sharing mechanism based on a top-down % of RoRE should be applied. However, we consider that an approach of this type might be beneficially applied to all areas of under- or out-performance, not just ODI returns. In our view, the returns or penalties accruing from performance commitments should be taken into account as part of a holistic view of performance against the determination as a whole, including financing, totex and the broader risk/review package.

Often, outperformance and underperformance in different areas of the settlement are expected, leading to an overall outcome which will be more balanced than the results of any single parameter might suggest. However, if all results from a price control settlement were materially higher than prior expectations and these resulted in highly asymmetric benefits for some stakeholder groups compared to others, then it would be reasonable to expect this to come under scrutiny.

In its PR19 business plan, UUW proposed a benefit sharing arrangement which sought to ensure that if returns to the company were materially higher than anticipated at the time of the determination and the attribution of those returns were at risk of appearing to be substantially to the benefit of investors above all other stakeholders, then there would be a Board-level commitment to share benefits more equally. This mechanism sought to ensure that there were clear expectations, prior to entering into a regulatory contract, that overall gains – from whatever source or sources – that were much higher than expected were dealt with in an appropriate way which recognised that all stakeholders should share a reasonable proportion of the benefit. We would support application of a global two-sided aggregate sharing mechanism as being the best approach to ensure that returns from all sources are reasonably shared between customers and companies, regardless of which element of the determination they are derived from.

Q5.12 Do you agree with our proposal to not set deadbands on any performance commitment?

Response: *Strongly Agree / Agree / Neither agree nor disagree /* ***Disagree*** */ Strongly disagree*

Whilst we agree that companies are often better placed to mitigate the impact of external factors such as weather events, rather than customers, it is not true that such events are wholly within management control.

It is important to note that deadbands do not provide a symmetric benefit (even if the deadband itself is symmetric), as they primarily provide companies with some alleviation for the downside consequences arising from events outside their control where Ofwat has also typically removed exclusions. Removal of both deadbands and exclusions places undue downside consequence for companies that are actively trying to manage and mitigate the impact on customers from the risks arising from incidents that are, at least in part outside of company control.

The net effect of this approach is a reduction in the expectation value of returns. In taking methodology positions on deadbands and exclusions, Ofwat should also consider the overall impact on the risk and return balance, and what the best policy response should be to allocating the consequence of event risks. Rather than being viewed as letting companies “off the hook” for not managing events effectively, deadbands could be viewed (for some ODIs) as a reasonable method for sharing in the inevitable downside consequence of events (such as weather) with customers. This more targeted approach would surely provide better customer protection than the alternative, which is to manage the consequence through overall returns - whereby we also note that the overall ODI cap/collar on RoRE is insufficient to manage such risks.

Where factors are within customers’ control, companies should not be held to account for failures in performance. An example of this is Compliance Risk Index (CRI). The vast majority of the samples for this common PC are taken at customers’ properties, downstream of their internal plumbing for which customers are responsible. The AMP8 common PC will require 100% compliance with the standards. This is problematic, given the location of the sampling point and given that companies do not control customers’ approaches to internal plumbing. An allowance to take account of sampling failures which are the customers’ responsibility and those which are the company’s could be accommodated through a deadband. Whilst a single failure assigned to a single property will have a small score in CRI, all of these individual failures can be significant in total, and companies should not be penalised for customers’ failures to maintain their own assets. The way in which CRI is scored means that a company asset failure will necessarily have a bigger impact on the index than the add up of customer-generated sample failures. Companies will therefore remain incentivised to invest and operate their assets so as to prevent such asset fails, however a deadband for customer-generated failures is appropriate.

Q5.13 Do you agree with our proposed approach to estimating ODI risk?

Response: *Strongly Agree* / ***Agree*** / *Neither agree nor disagree* / *Disagree* / *Strongly disagree*

In our response to Ofwat's discussion paper on risk and return we advocated that a different approach should be taken at PR24 to the estimation of risk and return overall. We note that it seems unlikely that all companies will alight on an identical and comparable approach, and that Ofwat has had to step in to provide a consistent assessment. We would suggest planning for that from the outset, with Ofwat establishing more prescriptive rules for performing the analysis, or to set out how it would plan to do it, and inviting feedback from companies on its approach. Ofwat's proposal of a light touch approach for the estimation of ODI risk should also achieve the aim of reducing the burden on companies in their business plan submission.

We also note that some company performance has repeatedly fallen (sometimes significantly) outside of the performance ranges indicated by those companies in their submitted business plans. It would seem reasonable for those companies to explain how that has been achieved, to ensure that lessons learned from exceptional performance can be learned, and/or ensure that targets and ranges are not being set for companies that are too easily achievable. This latter risk is a natural consequence of Ofwat's preference for common targets, whereby differences in operating environments can lead to some companies in favourable environs easily achieving (and significantly outperforming) those common targets. Such insight into company performance against those targets should be valuable to testing whether in fact common targets are actually appropriate, or if a company specific approach should be applied, in the best interests of customers and the environment.

Q5.14 Are there instances where providing greater clarity over our intended approach to incentive rates in PR29 would clearly be in the interests of customers? Please explain why and provide supporting evidence.

Response: *Strongly Agree* / ***Agree*** / *Neither agree nor disagree* / *Disagree* / *Strongly disagree*

Greater clarity over Ofwat's intended approach at PR29 (and over the longer term) would provide greater regulatory certainty and facilitate better planned and targeted investment activities. We are therefore generally supportive of this approach.

Q5.15 Do you have any comments on our proposed approach to implementing and streamlining payments at PR24?

Response: *Strongly Agree* / ***Agree*** / *Neither agree nor disagree* / *Disagree* / *Strongly disagree*

We agree with Ofwat's proposed approach to ODI payments (in-period and applied to revenue).

We see merit in retaining the ability to defer the impact of ODI payments between years and, whilst we have not so far utilised this functionality, it is a consideration when setting annual charges and assessing affordability of bills. The functionality could be improved if ODI underperformance payments could also be deferred (and not just ODI outperformance payments), for example to offset the impact of a significant RFI adjustment in a particular year.

Q5.16 Do you have any wider comments about the ODI framework at PR24?

Response: *Strongly Agree* / *Agree* / ***Neither agree nor disagree*** / *Disagree* / *Strongly disagree*

We consider that Ofwat's proposals for the ODI framework at PR24 constitute a fairly sizeable change in the balance of risk compared to PR19 and PR14. Reducing companies' ability to create bespoke incentives whilst also removing exclusions for items such as weather events which are outside of management control, removing deadbands and utilising only limited caps and collars in the design of incentives means that there is less continuity with previous price reviews and a significant transition in risk between PR19 and PR24. We would welcome a closer link to past price reviews in terms of how performance is incentivised, which would aid confidence in regulatory certainty (something which we recognise Ofwat is keen to facilitate going forward given its comments on the continuity of incentives into PR29).

We consider also that Ofwat's proposal to remove long-standing exclusions from AMP8 performance commitments must be factored into the setting of AMP8 performance commitment targets (PCLs). When Ofwat calculates upper quartile and frontier points, this will be done using historical data which retains these long-standing exclusions and therefore is not prepared on the same basis by which company performance will be incentivised in AMP8. We suggest that Ofwat must adjust historical data sets to ensure they are calculated on the same basis as the AMP8 PCs. If it has insufficient detail to do this itself, then it should issue a request for information to all companies in order to create this necessary historical dataset.

Ofwat's proposal that all enhancement cases must offer customer protection in the form of a PCD could result in the creation (and maintenance) of a significant number of AMP8 PCDs. For example, we envisage that PCDs may be required for WINEP schemes, WRMP schemes, etc. These PCDs would more than likely be bespoke to each company and would require considerable reporting by companies and individual assessment by Ofwat every year. This is set against a backdrop when Ofwat appears keen to reduce the quantity of bespoke PCs in the industry, partly due to the sheer weight of administration required in governing the process. The magnitude of such an administrative task should be considered in Ofwat's proposals around how to incentivise company performance and how to assess cost and offer customer protection.

Finally, we are also keen to see how the ODI framework can better support other policy areas at PR24, for example:

- Long term adaptive planning – with future trigger points leading to different pathways of delivery and expenditure, we suggest that the outcomes framework (and PCDs in particular) should be used to support the execution of those long term plans, i.e. to ensure that adaptive plans are backed by adaptive regulation; and
- Partnership and nature based solutions – the risk profile of such solutions is very different from traditional grey solutions, which have far greater ex ante certainty in cost and likely performance. Conversely, partnership and nature based solutions can be more evolutionary in their delivery (new partners may be identified, or planned partners may withdraw, and the cost / benefit of such schemes can evolve over time). As such, we advocate that the outcomes framework should be used to better support and incentivise such schemes ex post, and place less reliance on the need for ex ante certainty, which otherwise is likely to restrict the number and scope of partnership and nature based approaches in business plans.

6. Setting expenditure allowances

Q6.1 Do you agree with our proposed approach to setting efficient expenditure allowances at PR24?

Response: *Strongly Agree / Agree / **Neither agree nor disagree** / Disagree / Strongly disagree*

We support Ofwat looking to further refine the PR19 models rather than seeking to start afresh. It is important to continue to utilise separate assessments to estimate base, enhancement and 'unmodelled' expenditures. We support the shallow/deep dive approach in favour of including additional costs in the base cost models or utilising an unmodelled uplift as this results in a more credible benchmark given the inability of base cost explanatory factors to accurately predict these costs.

However, we consider it would be more appropriate to remove enhancements from the Wholesale base expenditure models and look to develop separate benchmarks for this expenditure, particularly for growth expenditure given the desire to change the approach to regulating developer services activities. We do recognise that Ofwat included enhancement costs in base models for PR19 as a solution to issues raised by companies at the IAP, but as Ofwat has subsequently gathered additional data for these areas that should make separate growth modelling more robust, this should be the starting aim for cost assessment.

We welcome Ofwat's desire to improve its bad debt modelling within Retail and would be happy to support the development of models for PR24 in an area where we feel that we have extensive expertise.

The one area that we would not support simply updating the PR19 models is in Bioresources, where we do not think that the PR19 models were of sufficient quality to derive a standalone allowance, particularly if they are going to be expanded to include all revenues within the dependent variable for PR24, rather than just base expenditure.

We do not support setting separate percentile efficiency challenges in WwN+ and Bioresources given the clear substitution effects present across the value chains that are not accounted for within the PR19 models and explanatory factors. While Ofwat may have addressed cost allocation issues between the price controls, it has not sufficiently recognised that different asset configurations will result in legitimate differences between companies on where costs are incurred e.g. dewatering, that will materially (more so than cost allocation issues) impact the efficiency challenge. We do not agree that the current explanatory factors sufficiently account for these effects. We believe that Ofwat should either account for cost incurred across the combined service or improve its modelling to account for the different quality of product that crosses the boundary and can therefore result in differences in costs between WwN+ and Bioresources across the sector. Setting separate efficiency challenges is appropriate if models are sufficiently robust or substitution effects between services are appropriately accommodated within the assessment or are negligible. This is why companies have not challenged separate efficiency challenges in Retail, because the services are largely distinct and more fully separated from one another. Bioresources and Wastewater network plus, however, are much more interrelated due to Bioresources providing a direct service to Wastewater network plus and the quality of the product being traded impacts the amount of activity that Bioresources must undertake.

We also do not support moving beyond the upper quartile when setting the catch up efficiency challenge. The ultimate decision as to what the appropriate percentile efficiency challenge is partly a matter for the overall balance of risk and return, but also needs to be justified by reference to the final model suite and the spread of residuals. There is (currently) no clear justification for moving beyond the UQ given the simplicity of the PR19 models, which increases the likelihood that residuals are due to omitted variables and not just (in)efficiency. Furthermore, as Ofwat is looking to make two-sided adjustments for cost adjustment claims this will correct for any misallocations highlighting that residuals can be both positively and negatively impacted by omitted variables, minimising the spread of residuals. We note that in the PR19 redeterminations, the CMA also did not support moving beyond the UQ for this same reason.

Q6.2 What are your views on how we can best align the treatment of third-party costs and revenues?

Response: *Strongly Agree / Agree /* ***Neither agree nor disagree*** */ Disagree / Strongly disagree*

We agree with Ofwat's approach from PR19 to make allowances where the cost equalled the revenues from third-party activity.

We think that it would be better for these costs to be excluded from the RFI in order to prevent there being any incentive for companies to over forecast volumes in their business plans.

Q6.3 Do you agree that companies that submit the most stretching and well evidenced business plans should receive the most favourable cost sharing rates at PR24?

Response: *Strongly Agree /* ***Agree*** */ Neither agree nor disagree / Disagree / Strongly disagree*

Differences in cost sharing rates was a strong incentive for UUW at PR19 and so we support the continued use of this mechanism to incentivise companies to submit stretching and ambitious plans. Ofwat should continue to apply cost sharing to totex in aggregate and should not look to set different rates for different types of expenditure e.g. base and enhancement, within a price control. Setting different rates will risk creating perverse incentives that might not be optimal to deliver long-run best value for customers, particularly if companies face alternative options for delivering service improvements.

We feel that it would be sensible to continue to set a single sharing rate for Water rather than having separate rates for Water Resources and Water Network plus given the interdependencies between the two controls.

We support there being pre-defined cost sharing rates for business plan assessment categories rather than deriving the cost sharing rate formulaically based on the ratio of business plan to cost allowance (as at PR19) as this removes any potential for differences in assumed scope at the BPA to influence resulting sharing rates, rather than just differences in (in)efficiency.

If Ofwat is going to make use of forward looking data in its derivation of benchmark and cost allowances, it should factor in the deliverability of any proposed reductions by companies and only use those that it believes are credible, taking into account a company's track record and relative ambition. Theoretically, as companies will receive Ofwat's view of efficient cost rather than their view of costs or a PR14 ex-ante menu-style approach, then the incentive created is to actually submit a zero-cost plan, which clearly would not be credible.

We support the continued use of asymmetrical sharing on business and cumulo rates and under the assumption that there is no change to the approach for valuing abstraction licences for AMP8, we agree that there is no longer a need for any further protection as offered in AMP7 over and above general cost sharing.

We do not support excluding nutrient neutrality from cost sharing. Excluding cost and revenue from cost sharing will mean that companies bear all of the risk of environmental improvements and the long-term growth across its region (upgrades to WwTWs will need to consider 40yr+ of developer growth not just the incremental AMP8) and so risks asset stranding. There is no justification to treat company statutory requirements to improve treatment works for nutrient neutrality any differently to any other statutory requirement applicable to the Wastewater Network plus price control. Whilst there is a case for companies to reflect such costs within their new connections charges, cost recovery should (per offsite network reinforcement) be part of the wastewater network single till. In this respect, nutrient neutrality requirements are entirely analogous to offsite network reinforcement, albeit for investment applicable to wastewater treatment works.

Q6.4 Do you agree that resilience enhancement should be used to fund companies to manage increasing risks to specific hazards that are beyond their control and not covered by base expenditure and other enhancement areas?

Response: ***Strongly Agree*** / *Agree / Neither agree nor disagree / Disagree / Strongly disagree*

We are supportive of Ofwat's intention to recognise resilience enhancement to manage increasing risks to 'specific hazards'. We agree that these 'specific hazards' should focus on those that are beyond the control of companies. We also agree that, to ensure efficiency and to avoid duplication, these enhancements should only be for those hazards where investments are not already implicitly reflected within base cost assumptions or in other areas of enhancement investment. Customers should be protected from paying for resilience twice.

We welcome Ofwat's recognition that certain areas of resilience are not covered by our statutory planning frameworks and other enhancement drivers (WRMP, DWMP, WINEP, SEMD) and we suggest that further engagement between Ofwat and water companies could be helpful to clarify the potential list of specific hazards, for example:

- Source water pollution – we assume that this is targeted at acute shocks resulting from the non-malicious action of others (e.g. agriculture, highways, and industry) and from land slips;
- Flooding - whilst Ofwat cites flooding from fluvial processes, other forms of flooding (e.g. pluvial, coastal, and impact of uncontrolled release of water from a third party asset) can be equally impactful and outside of management control;
- Material demographic changes – such as changes in populations within identified areas of inundation risk; and
- Failure of third party services - Ofwat provides the example of power system failure, but we think this could be extended to communication systems, fuel, and chemical suppliers.

Q6.5 Do you agree with our proposed approach to setting performance commitment levels at PR24?

Response: *Strongly Agree* / ***Agree*** / *Neither agree nor disagree / Disagree / Strongly disagree*

We support the intention to draw a clearer link between cost and service expectations as well as considering the overall stretch required of companies' cost and service as a package. However, when setting PCLs and cost allowances we believe that it needs to be recognised that companies do perform differently across the various measures and will have different relative strengths and weaknesses. This means that the assumed target (e.g. an upper quartile) for every performance commitment level is unlikely to be achievable by any one company alone, and certainly not by 3 or 4 companies.

Having ambitious and stretching targets needs to be associated with appropriate cost assumptions, but we believe the methodology puts too much faith into an assumption that 'base costs' alone can deliver improvements across a very wide range of performance commitments. We believe that this is an unrealistic assumption, particularly when historical performance (in the 'base' years) has not achieved the equivalent improvements in service, and (in many cases) historic improvements have been driven by enhancement spend (as Ofwat recognises).

It is also important not to conflate the productivity/frontier shift applied to totex with any assumptions of 'what base buys' and that these two effects are ultimately providing stretch on the same area and so should be assessed independently.

We agree there are some service improvements that can be delivered from base models, where historic improvements have been as a result of botex, but not where enhancement spend has driven prior improvements.

Ofwat's quantifications for its assumptions of 'what base buys' need to be clearly set out and supported by robust analysis, for example:

- The cost of meeting the assumed performance improvement must be credibly achievable from base – however, if Ofwat assumes that base can deliver a level of improvement that has not previously been achieved, then it must be satisfied that delivery of such an improvement will not require (for example) very significant new investment to achieve – this should be recognised within enhancement costs;
- The assumed performance must be equally achievable by all companies for an equivalent cost. If not then either (a) company specific performance targets should be set (where required cost differentials are highest) or (b) cost assessment should reflect the differences in costs required.

There is a need to recognise and clearly differentiate between where (within the entirety of the dataset):

- spend has been incurred and therefore can be fully assumed in base allowances;
- Where there might be only a partial coverage in the historic dataset (either by the number of companies or number of years), only a partial/implicit allowance should be assumed.
- Where there is no actual implicit allowance within the model prediction, in this case 'base buys' is entirely referring to an additional productivity challenge to the sector. In this case, Ofwat must be transparent in reflecting this additional productivity challenge within its assessment of the overall stretch and productivity being applied to companies, to ensure the overall package of cost and service is stretching but realistic.

Ofwat should recognise there is a limit to the amount of productivity improvements that can be delivered across all service areas, simultaneously, by all companies. It should also recognise that company performance that is funded by base might not be equal across all PCs and therefore any assessment of 'what base buys' across the sector cannot simply be a comparison made on a measure by measure basis, it is the overall package or base cost and service that is comparative.

Q6.6 Do you agree with our view on what performance commitments should be set using common or company specific performance commitment levels?

Response: *Strongly Agree / Agree / Neither agree nor disagree / Disagree /* ***Strongly disagree***

Whilst we very strongly support the notion of company specific performance commitments, where appropriate, we do not support the list of performance commitments that Ofwat believes should have common performance levels and expected from base expenditure allowances (table 4.1, p69, Appendix 9).

In particular, there is little evidence to support an assumption to presume that companies can deliver the same levels of performance in sewer flooding (both internal and external) and storm overflows. We consider that there is strong evidence to the contrary, in particular:

- Performance levels for both sewer flooding and storm overflows are heavily dependent upon exogenous factors such as the amount of surface run-off from rainfall and the proportion of combined sewers in a company's region;
- In order to achieve equivalent performance between companies, significant changes to company infrastructure would be required (for example, equivalent levels of surface water separation, particularly in urban areas); and,
- These factors are not accounted for in Ofwat's PR19 wastewater models, and we are concerned that the actual cost differences required by some companies (such as UUW) to deliver a common level of performance might be disproportionately high given other customer preferences and objectives.

Separately, in our Future Ideas Lab submission '[What lessons can we learn from cost assessment at PR19?]', we have provided evidence to Ofwat that econometric modelling of sewer flooding performance provides robust and reliable explanation of performance differences between companies. We consider that this should be taken into account in determining the appropriate performance target to incentivise companies in the best interests of customers. The result of this approach would be a more bespoke target for each company. This will better serve customer interests than a common uniform target because a uniform target will be too lenient for some companies (in favourable circumstances) and therefore customers will overpay for apparent performance rewards, whilst targets for other companies (in unfavourable operating environments) will would require excessively high and inefficient levels of investment to reach otherwise unattainable targets.

Furthermore, performance levels for customer contacts about water quality are strongly impacted by our water sources and we consider that company specific performance levels are therefore appropriate. UUW's water sources are predominantly soft upland surface waters which create legacy deposits that build up in the water supply system. These low alkalinity water sources are more corrosive and generally lead to an increased corrosion rate within the network, as well as deposition of manganese and iron in the network. Whilst we have treatment in place to remove the vast majority from the raw water, even at low concentrations, valve operations tend to mobilise these deposits quite readily when compared to hard water areas. These soft upland waters are also more prone to geosmin and 2-MIB, which leads to increase in taste and odour contacts from customers, captured by this common PC, more so that companies with predominantly groundwater sources. We would therefore also promote that performance levels for customer contacts about water quality should be set on a company specific basis.

In our Future Ideas Lab paper '[What lessons can we learn from cost assessment at PR19?]', we set out a framework that can be used to assess whether it is appropriate to set a common or a company specific target. We have further developed this approach as part of our latest Future Ideas Lab paper "[Making the cost assessment framework resilient to future challenges]'. These papers provide a clear and defendable framework for setting performance targets from base expenditure which reflect local circumstances and drive efficient investment activity on which best serves customer interests.

Whilst we agree with the other performance commitments that Ofwat has identified as requiring company specific performance levels, we urge Ofwat to adopt this framework-based approach in providing better support and justification of the chosen approach to setting targets for companies across the industry (whether common or company specific). This will improve the transparency in the decision making and enable companies to understand the reasoning for the approach.

For the avoidance of doubt, we do not interpret that a '*common performance level expected from base expenditure allowances*' does, or should mean that base cost allowances are necessarily sufficient to deliver the entirety of the forward looking performance commitment level, only that it may be reasonable to amount that base can deliver is consistent across all companies. As we have stated in response to Q6.5, the improvement that can be delivered by base is dependent upon the improvements historically achieved through base expenditure.

Q6.7 Do you agree with our proposed approach to incentivising and funding efficient investment in reducing greenhouse gas emissions and reducing the use of storm overflows?

Response: *Strongly Agree / Agree / Neither agree nor disagree / Disagree /* ***Strongly disagree***

Whilst we broadly agree with Ofwat's approach to greenhouse gas emissions (subject to some points of detail summarised below and set out in more detail in our response to question 12.6), we strongly disagree with the approach taken by Ofwat on storm overflows, particularly in its expectations of company performance in AMP7, which would then set the starting basis of assessing the cost of meeting future environmental requirements on overflows.

Storm Overflows

Ofwat's basic assumption that companies should be delivering a 20-spill average by 2025 is unreasonable because:

- Its expectations that companies achieve an annual average of 20 spills by 2025 goes significantly beyond compliance with the existing permit regime;
- There is no recognition (or even exploration) of the factors that impact on spill frequency (within permit compliance), and the differences in these factors between companies. This includes rainfall, which is clearly a significant driver of spill frequency, and which differs significantly between company regions. The difference in rainfall, particularly between the (relatively wet) north west and the (dry and water stressed) south east is a recognised difference between companies when regulators consider water trading and water resources availability. These same factors – of rainfall volumes and concentration – also need to be taken into account when assessing regulatory approaches towards wastewater services, including consideration of overflows;
- There is no recognition of the significant enhancement investment that would be required to achieve the level of performance put forward. For some companies such significant changes in performance necessitate significant enhancement investment, such as additional storage. Overflow performance is not simply an issue of operational performance and maintenance that can or has been funded by base expenditure; and
- Ofwat asserts that current average spills performance by some companies legitimises that level being expected of other companies from base costs, but there is no evidence or economic assessment to support its assertion. In fact, existing independent evidence commissioned by Defra clearly demonstrates the very significant differences between companies in required enhancement costs to meet government's proposed long term spills targets.

We are concerned that application of a uniform target of a 20-spill average frequency by the beginning of AMP8 would amount to introduction of new, non-statutory performance targets on companies within the AMP7 period which were not signalled in the PR19 final determinations. We therefore welcome Ofwat's comments that show an openness to considering local circumstances and exogenous factors in determining an appropriate exit point from AMP7 for flooding performance. We appreciate that AMP8 investment needs to be efficient, and from a point of compliance with current permits – however, that should not assume a specific spill frequency measure. We consider this needs much greater prominence in Ofwat's final methodology so that it is clear this will be taken into account in determining the most efficient and reasonable approach, and that there should be no presumption that a 20-spill average frequency should be uniformly applied.

In line with our response to the previous question, we have developed a framework that can be used to assess whether it is appropriate to set a common or a company specific target our latest Future Ideas Lab paper "Making the cost assessment framework resilient to future challenges'. This paper provides a clear and defendable framework for setting performance targets from base expenditure which reflect local circumstances and drive efficient investment activity which best serves customer interests. We urge Ofwat to adopt this framework-based approach in providing better support and justification of the chosen approach to setting targets for companies across the industry (whether common or company specific). This will improve the transparency in the decision making and enable companies to understand the reasoning for the approach. We expect to provide further evidence to Ofwat regarding appropriate targets for overflows which will more reasonably reflect historic and future approaches to overflow requirements and performance.

Greenhouse Gas Emissions

We agree that it is right for Ofwat and the water sector to act together to contribute to the national legal requirements for net zero 2050 and 78% reduction by 2035. PR24 should play a critical role in ensuring the sector is on the right trajectory for these targets, and working with enough pace and delivery in AMP8 and beyond. At United Utilities, we have bold and independently-verified science-based targets across emissions scopes 1, 2 and 3. We welcome the opportunity to focus on greenhouse gas (GHG) emissions' impact within and beyond base. However, some elements of the detail of Ofwat's draft methodology proposals would benefit from additional clarification before the final methodology.

Across both the performance commitment and incentive mechanisms detailed in the draft methodology, we consider that the approach put forward by Ofwat has the right intentions but consistent reporting and effective and efficient carbon management will need resolution of significant issues of complexity and ambiguity. We consider that some further areas need to be considered to enable emissions reduction within company control to be reported and performance measured fairly. We focus upon Ofwat's approach to GHG emissions in response to question 12.6.

Q6.8 Do you agree with our proposed approach to implementing nutrient neutrality in the PR24 regulatory framework?

Response: *Strongly Agree / Agree / Neither agree nor disagree / Disagree /* ***Strongly disagree***

We consider that there is inadequate justification for the proposal that this should, at least in part, be funded directly by developers away from the WwN+ revenue control. In particular, we are concerned that:

- There is no guarantee that developers will instigate developments in the areas that we are being required to invest (and this is not within our control), which will lead to those investments being left (effectively) unfunded.
- Setting reasonable charges for developers on a sub-regional basis to reflect the cost of meeting nutrient neutrality requirements in those areas will be almost impossible, as it would be unfair to charge the first developer the full cost, and future developer activity will not be sufficiently predictable to set a level of charge that will enable companies to recover costs without risk of significant over/under recovery.

We propose that the only feasible option is for nutrient neutrality investment to be fully allowed for within the WwN+ single till price control, and all developers be charged for the overall costs, over the medium to long term. This would be an equivalent basis as other offsite developer related costs, on the network (i.e. network reinforcement), which is charged to developers through infrastructure charges. In this respect, the neutrality investment costs would be funded by developers via an equivalent charging approach.

Q6.9 Do you agree with our proposed approach to encouraging companies to deliver best value through our cost assessment?

Response: *Strongly Agree /* ***Agree*** */ Neither agree nor disagree / Disagree / Strongly disagree*

We support Ofwat's recognition that it should consider proposals from companies for higher cost projects that deliver significant additional value to customers and the environment. However, we would be keen to explore further how these should best be focused and prioritised. Given the general macro-economic background and cost of living crisis, it is important that such proposals do not place undue additional burdens onto customers.

We agree that there is a need to provide structure to enable companies to deliver best value business plans, and the proposed approach is a further step in the right direction. We also agree that enhancement expenditure is the logical place to direct companies to complete best value assessments. However, we believe there are significant and meaningful opportunities to drive better value by assessing value for botex as well as enhancement.

We agree with many of the details suggested for best value assessment in Appendix 9, Section 6 which will help companies to be more consistent and comparable. However, there is also a need for the acknowledgement of potential misalignment of the value assessment approached caused by different regulatory timelines for the WRMP, DWMP and WINEP. We have worked to align these approaches as much as is possible, as we believe having a consistent definition of value is important for making credible and consistent decisions.

In addition to this, we feel there is a need for acknowledgment that assessing best value is an evolving area of expertise, where companies will be maturing their approaches as better information and methodologies become available. Our approach is to continue to learn from our own assessments and our peers to make sure our approach is as robust as possible. We are mobilising a multi-capitals sector network for the companies that use multi-capital accounting approaches to assess value, with the aim to align and mature our approaches at PR24 and beyond.

Q6.10 Do you agree with our proposed approach to removing the potential disadvantage that nature-based operating expenditure solutions may face in relation to the treatment of enhancement operating expenditure?

Response: *Strongly Agree / Agree /* ***Neither agree nor disagree*** */ Disagree / Strongly disagree*

While UUW proposed the NPV-approach in an earlier discussion paper, we recognise that this addressed only one aspect of NbS i.e. funding over multiple AMPs and not other aspects (such as uncertainty in the delivery of benefits). We consider that there is a viable alternative solution that addresses these other aspects. This solution comprises a suitable, flexible and ready-to-implement mechanism that draws upon the positives of Ofwat's proposed alternatives. This approach is set out in more detail in our Future Ideas Lab paper and is consistent with that introduced by Reckon LLP in a paper that examines how the approach to base and enhancement expenditure could be made more coherent. The benefits of this mechanism include:

- It requires minimal changes to the regulatory framework, and is similar to approaches used in the past;
- It is practical to implement immediately at PR24;
- Companies benefit from additional regulatory certainty; and
- It allows for sufficient flexibility that Ofwat can update assumptions at future Price Review through a predefined framework, which ensures customers benefit from new information on efficient costs.

Ofwat would determine at PR24 that certain enhancement initiatives, for one or more companies, would be funded through new adaptable multi-AMP enhancement funding arrangements. This arrangement would provide the relevant water company with a separate stream of funding for these enhancements, for a period spanning multiple price control periods (to be suggested by companies but determined by Ofwat). The expenditure incurred on these enhancements would be excluded from future base cost models.

Ofwat would determine at PR24 the scale of enhancement benefits that the company is to be funded for; an allowance for operating expenditure per unit of those benefits; and a default time period for the funding of that enhancement, spanning multiple price control periods (e.g. 20 years). Where the benefit is not delivered, expenditure could be returned to customers through a performance commitment deliverable, if not directly linked to a common (or bespoke) performance commitment.

At each subsequent Price Review, Ofwat would have the ability to update the unit cost allowance, in the light of the latest information on efficient costs.

Ofwat would also have some pre-specified flexibility at subsequent Price Reviews to terminate the funding for the enhancement initiative before the end of the default time period (e.g. if there is evidence that the enhancement benefits are no longer needed) or to reduce the scale of benefits that are to be funded.

While there would, therefore, be no firm long-term commitment to the amount of funding to be provided over multiple price control periods, there would be an established methodology for determining these at each review. Instead, a provisional allowance for the long-term funding amount (e.g. estimated over 20 years based on initial assumptions on unit costs and volumes) could be determined at PR24, with the conditions under which this would be expected to change made clear. This allowance, insofar as it relates to price control periods subsequent to AMP8, would be published and recorded but it would not be included in totex allowances or the RCV at PR24.

Once the funding expiry date passes, the opex related to that project is added into base costs with continued operation being funded from base expenditure. This would be analogous to how companies are expected to maintain traditional capex-solutions using base allowances.

7. Aligning risk and return

Q7.1 Do you have any comments on our approach to the overall balance of the PR24 incentive package, our proposed guidance on producing risk ranges, and our view of the balance of risk facing the notional company?

Response: *Strongly Agree / Agree / **Neither agree nor disagree** / Disagree / Strongly disagree*

We note that the overall balance of risk and return encapsulated within Ofwat's proposed PR24 methodology leads to a clear direction of increased risk and reduced returns. For example:

- Tougher targets on relative efficiency (tougher than PR19) and forward looking efficiency – despite there being little evidence of significant company outperformance on cost, especially base cost.
- An assumption that more service improvements should be implicitly funded from base costs – this is an additional cost efficiency, leading to further risk of cost under-recovery.
- A drastic reduction in bespoke performance commitments and the associated incentives – given that the majority of historic company rewards for ODIs have resulted from bespoke measures, other things equal this will lead to a downside impact on company returns.
- Ofwat's WACC and financeability proposals – more challenging across multiple WACC inputs, and less headroom to manage financeability.
- Business plan incentives – a greater range of incentive values has been proposed, but with an emphasis on an increased value of penalties (rather than increases in rewards only.) This is likely to put downward pressure on the expectation value of returns.

In addition to these more significant impacts, there are many other minor changes having a similar effect, such as the removal of deadbands and exclusions for outcomes, leading to less alleviation for companies facing the impact of events (e.g. extreme weather, third party interference leading to asset damage or failure, etc.) – the impact on company returns will be skewed to the downside, even if the removed deadbands were applied symmetrically (this is due to event risks being skewed to the downside.)

It is important for Ofwat to contrast its positioning of PR24 relative to current company performance against PR19 assumptions. Companies are not, in general, showing strong outperformance against the PR19 determinations to date and tougher targets and challenges arise as the AMP progresses. The significant additional stretch being expected for PR24 does not seem consistent with the apparent limited headroom for the sector as a whole to make significant further improvements in cost and performance based on current observed levels of company performance. None of this is to imply that companies are not performing well; however, it seems very evident that t PR19 assumptions and targets were clearly set at levels which are very challenging and difficult to achieve. In this context, whilst there is undoubtedly a need for companies to deliver improved services for customers and environmental outcomes in AMP8 we consider that Ofwat should be cautious about the extent to which it seeks to magnify challenges at PR24 and that it should be mindful of the limited degree of outperformance being observed against PR19 determinations.

Q7.2 Do you agree with our proposals on the regulatory regime for managing companies' exposure to uncertainty over 2025-2030?

Response: *Strongly Agree / **Agree** / Neither agree nor disagree / Disagree / Strongly disagree*

In general, we support Ofwat's approach to uncertainty mechanisms – whilst there are many, it is appropriate in light of the uncertainties faced by the sector, and the ex ante approach to many areas of the price controls process.

We have three main comments:

- We support the retention of the mechanisms identified, and believe Ofwat should resist any calls to reduce them;
- We assume that the PR19 WINEP mechanism will be superseded by PCDs, albeit we consider that there should be capable of being more symmetric, rather than being one sided.
- We support, for PR24, a retention of the Developer services revenue adjustment (DSRA), albeit with a change in scope (a) to remove cost of onsite work, and only include offsite work (e.g. network reinforcement), and (b) there may also be a role, depending on Ofwat's final approach to nutrient neutrality, to also use the DSRA to manage the risk of over/under recovery.

Q7.3 Is there value in introducing more prescriptive requirements and guidance for company-produced RoRE risk ranges? How might this be implemented for:

a. Interactions between performance on cost and service?

b. Interactions between performance on different ODIs?

Response: *Strongly Agree / **Agree** / Neither agree nor disagree / Disagree / Strongly disagree*

In general, we have observed that companies are clearly taking different approaches to assessing the RoRE range impact of cost and service performance, and would welcome a more standardised approach.

Q7.4 Do you agree with our proposed approach to setting the allowed return on equity?

Response: *Strongly Agree / Agree / Neither agree nor disagree / **Disagree** / Strongly disagree*

Overall we are concerned that there is an imbalance in the number of methodology changes for both the cost of equity and the cost of debt that appear to supress the allowed cost of capital by introducing those changes with a downward bias whilst rejecting others with an upward bias.

This is set against a background of significant changes in the macro-economic environment (e.g. interest rates) and increasing risk and uncertainty for water and wastewater companies at PR24 (e.g. increasing environmental risks, supply chain challenges, changes to the regulatory regime, etc.) and increased investment needs which, all else equal, would indicate that a higher cost of capital is actually required. Setting an overly low cost of capital at a time of significant reliance on equity financing would harm investor confidence and undermine efforts to support investment by the sector for the benefit of customers.

Additionally, the proposed introduction of a tighter dividend lock up level in licenses is likely to impact equity investor's views of the risks of their investment requiring additional compensation, compounding this effect. We are responding separately to Ofwat's consultation on the ringfence.

We have two specific areas of strong disagreement in relation to Ofwat's approach on the allowed cost of equity: Firstly we strongly disagree with the potential lowering of the notional gearing assumption. Secondly we strongly disagree with the proposed approach to adjust the debt beta in order to neutralise perceived issues with the relationship between WACC and gearing. There are also a number of areas of smaller disagreement that we list below.

Both of our areas of strong disagreement relate to the options put forward in relation to delevering and relevering beta. We continue to strongly disagree with all of the options put forward by Mason & Wright that were included in the December 2021 discussion paper as set out in our previous responses. However, in this response we focus on the remaining options highlighted in the draft methodology.

In relation to delevering and relevering beta, we support option 1, which is the continuation of the PR19 approach to delevering and relevering beta.

We disagree with the founding premise that there is a problem with a WACC that varies with gearing. The expectation that WACC is invariant to gearing is based on a 'perfectly efficient market' (i.e. no tax, no default premium, etc.) that does not apply in the real world and as such it does not make sense to expect the theoretical WACC invariance to gearing to also exist in the real world.

Further, in seeking to solve for this possibly theoretically correct relationship between WACC and gearing, the alternative proposed solutions introduce outcomes that are either unsupported by market evidence, introduce additional uncertainty and potential for error due to additional uncertain parameters, contravene long held regulatory precedents, or may not necessarily hold in different market conditions.

In addition, even if invariance of WACC to gearing were a valid concern there could be other simpler methods of addressing the same issue by, for example, increasing the risk free rate.

We strongly disagree with Ofwat's preferred methodology to de-lever and re-lever beta (option 2). As stated above we disagree with the underlying premise that there is actually an issue that needs to be addressed. The proposed option appears to introduce more issues than it seeks to resolve. Not only are additional parameters introduced (such as probability of default) that are subjective requiring the application of judgement and will therefore introduce uncertainty, volatility and error, but also the outcome results in an implausibly high debt beta that is not supported by any reasonable evidence nor is in line with any previous regulatory precedent.

Applying a direct approach to estimating a debt beta through OLS regression of the total return on water company bonds compared to total market returns, using GBP bonds over £250m issued before 2016 by the listed water companies, results in a 25th to 75th percentile range of 0.02 to 0.06. This is well below the potential debt beta of over 0.20 proposed in the methodology, which appears implausibly high in comparison.

We also strongly disagree with proposals (albeit not currently preferred) to lower notional company gearing, both in relation to the notional company assumption and as a 'solution' to the perceived issues with de-levering and relevering (i.e. option 3). We agree that the water sector faces increasing risks (with the consequence that PR24 beta would be expected to be higher than historic levels) and that it is appropriate to have a well-functioning equity buffer. However, we strongly believe that 60% gearing already provides a sufficient equity buffer notwithstanding an increase in risk and no compelling evidence has been put forward that implies otherwise.

There is no market evidence to support lowering the notional gearing below 60% and there are better regulatory tools available to deal with higher future risk that do not appear to have been considered by Ofwat (such as uncertainty mechanisms) and it is regulatory best practice to maintain stability in the absence of compelling evidence to change methodology to avoid unnecessarily undermining investor confidence.

We note with caution Ofwat's comments that it will take account of evidence from gearing levels across European equity markets. Whilst there is insufficient detail on what evidence may be used and how, we note that European utilities have different risk profiles and structures compared to the water sector in England and so any gearing evidence may not be relevant.

Moody's A3 credit rating assessment covers a gearing range of 55% to 65%, so the existing 60% assumption is mid-range of the A3 assessment with the proposed 55% gearing being at the lower end of the range. Gearing would need to be consistently and comfortably below 55% with adjusted interest cover over 2.0x to actually move the notional company to an A2 credit rating. Therefore lowering the notional gearing further is unlikely to 'change the needle' in relation to notional company resilience but would simply serve to make the notional company less representative of the actual sector or individual companies (more so if pension deficits are included in the gearing definition as per credit rating agency methodology).

Further, we see 60% gearing as being well aligned to the indices used for the allowed cost of debt and the minimum target ratings for the financeability assessment of Baa1/BBB+. A reduction below 60% would stretch the credibility of consistency with other elements of the cost of capital assessment, especially the use of a historic debt beta that is based on water companies with a much higher RCV-based gearing.

In relation to Ofwat's comments that changes to the notional gearing can be used as a signal to companies, we think there are better and more effective ways to signal and/or encourage lower levels of gearing. We consider that a positive incentive mechanism to reward companies that maintain regulated company gearing close to the notional gearing assumption through an uplift in the cost of equity would be effective as it would be a direct incentive to reduce gearing and could be tiered to provide greater incentive to reduce gearing where gearing is further away from central assumptions. This incentive could be prospective or retrospective but should take into account companies' pension deficit positions and also exclude any DPC impact.

The assumption that the notional company would have necessarily de-geared materially due to the high inflation environment is not necessarily the case. The financial years ending 31 March 2020 and 2021 were periods of low inflation, and therefore some of the current high inflation is simply offsetting that earlier low inflation. The additional high inflation beyond this offset, could potentially have been retained with the result of a modest amount of deleveraging, but equally could have been reinvested to help improve performance delivered to customers, in line with Ofwat's comments on appropriate sector behaviour. If so, this would not have resulted in notional company deleveraging and is in line with UU's expected AMP7 gearing trajectory, which does not show a material deleveraging, in part due to due to significant reinvestment of inflation derived outperformance for the benefit of customers over AMP7.

Other areas of disagreement include:

- We disagree with Ofwat's proposal that beta data from the period affected by the Covid pandemic should be treated equally with all other beta data. We also disagree with Ofwat's assertion that pandemics are likely to become more frequent in the future and do not believe that there is any widespread agreement that materially impactful pandemics are likely to recur. Even if pandemics did recur it is incredibly unlikely that lockdowns would be anywhere near as severe or even tolerated at all, and therefore the Covid related impact on financial markets over 2020 is unlikely to regularly recur.

  In addition to the impact of Covid on water sector betas, the war between Russia and Ukraine is also resulting in supressed betas by virtue of investors treating UK regulated utilities as a safe haven investment in times of volatility and uncertainty.

  Overall whilst we don't necessarily support the complete removal of data over the period affected by Covid, we do agree with the use of a range of estimation periods (2, 5 and 10 years) but with more weight being placed on the unaffected periods via the use of longer averaging periods as opposed to spot measures. Whilst spot measures have historically been seen as more robust, given the issues associated with Covid affected data, we think that on balance longer averaging periods are now more appropriate. If longer averaging periods were not adopted by Ofwat then we would be of the opinion that Covid data would need to be removed from the beta data set. This is in addition to a potential uplift to beta to reflect the increased future risk at PR24 as mentioned above.

- We disagree with Ofwat's conclusion that there is insufficient evidence for a convenience yield adjustment to the risk free rate on the basis that the evidence is mixed and volatile. Evidence from academic literature and market practitioners does show that there is a convenience premium attached to the yield on index linked gilts which pushes the yield below the required rate of return for a zero-beta asset. Convenience yield estimates are produced without relying on the accuracy of any particular theory, they are driven by high-frequency observations from financial markets, produced for a range of time periods and specific UK estimates are available.

  The latest academic evidence is shown in Table 1, and on this basis we see a convenience yield adjustment of c38bps being appropriate.

Table 1 - Academic evidence on yield adjustments

Study	Market	Time-period	Estimate (bps)
van Binsbergen et.al (2022)	US	2004-2018	40bps
Diamond & van Tassel (2021)	UK	2005-2020	38bps
Diamond & van Tassel (2021)	US	2005-2020	35bps
Diamond & van Tassel (2021)	Euro area	2005-2020	24bps

van Binsbergen et al (2022), Diamond & van Tassel (2021)

Further with the introduction of a convenience yield adjustment to the risk free rate, this reduces the need for inclusion of AAA rated corporate bond yield evidence in the risk free rate assessment, which seeks to address the same issue of depressed sub-risk free rate yields on index linked gilts.

We would also caution against too much reliance on SONIA swaps as a cross check, as supply-demand imbalances, collateralisation and other swap specific factors, mean that unadjusted figures may not be reliable. We note that there is regulatory precedent of both including a convenience premium to the risk free rate (the CAA allowed 32bps in its Final Proposals for the H7 price control) and/or including evidence from AAA bonds in the assessment of risk free rates, both of which address the same point.

- We disagree with Ofwat's proposals to only use a MAR based cross check. We believe that a broader range of cross check should be included covering other market based cross checks and also dividend growth model.

  Whilst MAR analysis has some use as a cross check it is not without its issues and is not sufficiently robust to be used in isolation. In particular, it is not possible to isolate the impact of cost of equity on MAR from the impact of the many other items that also materially impact MAR, e.g. investor sentiment, flight to quality, outperformance against the regulatory settlement, pension position, etc. We do not agree that a MAR above 1 necessarily implies that the allowed cost of equity has been set too high.

  Further in relation to private transactions there are even more reasons why investors may be willing to transact at a value that is above RCV. These include (amongst others), investor assumptions that are not guaranteed to materialise (e.g. terminal values, etc.), controlling/influencing voting stakes, commercial and strategic synergies, etc. In our view no reliance should be placed on MARs derived from private transactions as a cross check for the cost of equity.

  Further, MAR is volatile and only gives short term information, even if MAR did give useful evidence about the current short term views on costs of equity it should not form the major part of cross checks for a long term cost of equity assessment.

  Other relative valuation market based cross checks should also be included. These should include comparing water company price to earnings and enterprise value to EBITDA ratios to other sectors. Such cross checks show that regulated utilities' valuations move with the market and actually have market valuations which are at the lower end compared to the rest of the market. This implies that the cost of equity set for the water sector is not elevated compared to the market in general.

  We consider that the dividend growth model (DGM) should also be used as a cross check. This is a well-established and reliable model and preliminary analysis indicates that the DGM implied cost of equity is higher than the CAPM derived cost of equity.

  Overall no single cross check is without its own issues, and MAR is certainly not immune to this point. We also note that the risks associated with setting the cost of equity too low do exceed the risks of setting the cost of equity too high, and whilst we are not explicitly proposing that Ofwat 'aims up' in setting the cost of equity, overreliance on MAR as a cross check would effectively be 'aiming down' and risking the disadvantages associated with an inappropriately low cost of equity, at a time when investment requirements are likely to have materially increased. As such it is inappropriate to over-rely on one negatively biased cross check and instead a range of indicators (as suggested above) should be used.

- Whilst not part of the proposed methodology, we note Ofwat's comments on the total market return (TMR) that question the standard approach of a fixed TMR with movements in the risk free rate and the equity risk premium offsetting each other one-for-one. We disagree with Ofwat's concerns and note that this would be a material departure from established regulatory precedent. Such a move could only be justified by significantly compelling evidence which we do not believe currently exists.
- We also note Ofwat's proposal on TMR to focus on the ex-post arithmetic range derived using overlapping estimator and 10-20 year holding periods. Whilst we do not specifically disagree with the use of this averaging technique, we do disagree that it should be the only technique used. It would be more appropriate to rely on a range of averaging techniques.
- In relation to the risk free rate we consider that a 6 to 12m averaging period is likely to be too long and that a shorter 1 month trailing average in line with PR19 methodology remains appropriate, although we acknowledge the 6m averaging period used in the CMA redetermination.
- On the beta comparator set, we agree with the inclusion of Severn Trent and United Utilities, but further data from Pennon should be included to the fullest extent possible where this can be used without complications from its Viridor holdings.

Our comments on the RPI CPIH wedge adjustment on the risk free rate have been directed to the specific question 7.6 that covers that topic.

Whilst we have focused on the area of disagreement in our response above, we do agree with many elements of the cost of equity assessment. We agree with the continued use of CAPM and the proposals to set a fixed (as opposed to indexed) cost of equity. As mentioned above we agree with Ofwat's rejection of most of the options proposed by Mason & Wright and included in the December 2021 discussion paper. We also agree with the use of the ONS's CPIH back series for 1950 to 1988 to deflate equity returns in the TMR calculation. In relation to both the cost of equity and the cost of debt we agree with the use of a long term assumption of 2% for CPIH.

We also agree that the same WACC should be set for each of the underlying wholesale controls, that companies who submit a business plan that achieves an outstanding assessment should receive protection against any downward movement in WACC at the final determination.

We agree with the proposed approach to calculate the retail margin adjustment to the appointee WACC to avoid double counting and are of the view that a household retail net margin of 1% remains appropriate. Finally we agree with the proposals to RCV to be 100% indexed to CPIH.

Q7.5 Do you agree with our proposed approach to setting the allowed return on debt?

Response: *Strongly Agree / Agree / Neither agree nor disagree /* ***Disagree*** */ Strongly disagree*

Whilst there are a number of areas where we do agree with Ofwat's approach to setting the allowed return on debt, there are some areas where we disagree, sometimes strongly.

We have two areas of strong disagreement: firstly, we strongly disagree with the exclusion of all swaps from the balance sheet assessment of sector embedded debt costs and also in the assessment of any outperformance on new debt. Secondly, we strongly disagree with the proposals for an ex-post outperformance adjustment on new debt. There are also a number of areas of smaller disagreement that we list below.

We strongly disagree with Ofwat's proposals to exclude swaps from the balance sheet cost of embedded debt. The sector has entered into swaps under good risk management practices, the swaps have provided benefits to customers over the years (as described further below) and reflect the true economic position of the relevant companies' cost of debt. Excluding swaps would misstate the sector's true cost of embedded debt.

The removal of swaps from the cost of debt assessments appears to be part of a range of measures that are being introduced to the cost of capital methodology, which on balance and in aggregate tend to supress the allowed cost of capital. We would support a more balanced approach.

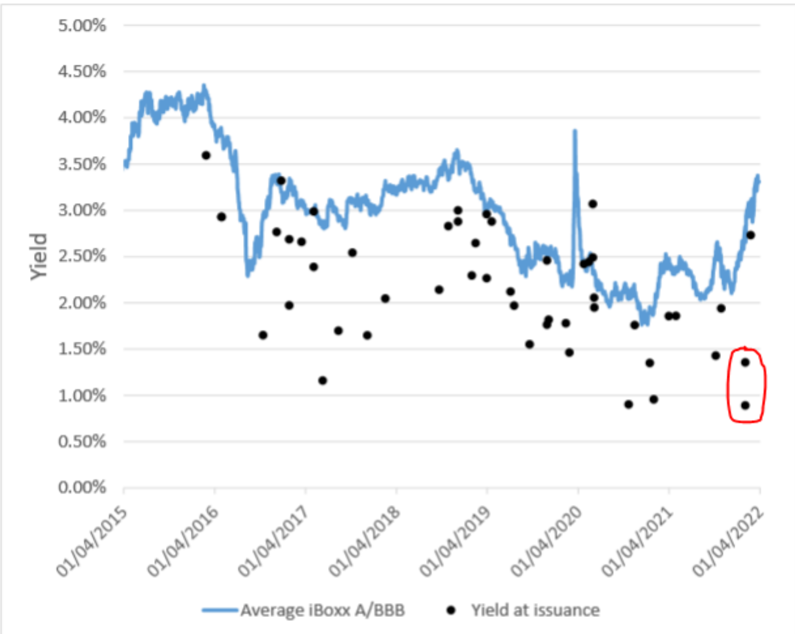
We would argue that it is clearly incorrect to exclude cross currency swaps from any assessment either of embedded debt costs or of outperformance on new debt as not only is it good risk management practice to manage currency risk when raising debt from non-GBP investors (as can be necessary to reduce reliance on a small pool of GBP investors) but, importantly, currency interest rates are not equivalent to GBP interest rates.

We use the Thames dual tranche EUR bond issue from January 2022 to illustrate this point. The 6 year tranche had a EUR yield of 0.891% and the 10 year tranche had a EUR yield of 1.356% both excluding bond fees, but we understand from market intelligence that these tranches would have swapped to GBP rates of c2.18% and c2.422% respectively excluding bond and swap fees. Therefore excluding the impact of the cross currency swap would miscalculate yields c1.1% to c1.3% lower than actually achieved, which is a very material misstatement.

We note that these materially misstated EUR yields appear to have been used (see Figure 1) in Ofwat's assessment of sector performance vs the iBoxx A/BBB indices included as figure 1.2 on p12 of Appendix 10 of the draft methodology. Therefore, whilst we have not assessed each of the other data points, we have serious concerns about the accuracy of these calculations and the magnitude and robustness of any resulting 'outperformance' adjustments that may be proposed by Ofwat.

Figure 1 - Ofwat's assessment of sector performance versus the iBoxx A/BBB indices may misrepresent actual performance

Figure 1.2: Fixed rate bonds since 2015.



Source: Refinitiv Data

Whilst not mentioned in the draft methodology, we understand that in a City Briefing on the draft methodology, Ofwat acknowledged that it was incorrect to exclude cross currency swaps. We welcome this acknowledgement and strongly believe that it is no different with other swaps, where it is also incorrect that they are excluded.

Certain forms of debt are difficult to raise in the absence of swaps, particularly CPI or CPIH linked debt and long dated floating rate debt. As the RCV is transitioning to be 100% linked to CPIH from 2025 it is prudent risk management practice to use inflation linked swaps to match debt costs to the regulatory model given the minimal availability of direct CPI or CPIH issuance. We strongly disagree that inflation swaps are just changing the profile of cash flows; these swaps are creating synthetic index linked debt that is more appropriately matched to the regulatory model and we strongly believe that inflation swaps should be included in balance sheet assessment of sector embedded debt costs.

Further it would be inappropriate for Ofwat to assume that the notional company could issue any meaningful levels of CPI or CPIH debt in relation to financeability testing whilst disallowing swaps in other areas of the methodology.

Excluding swaps from calculations of sector costs of debt is likely to be interpreted as a strong signal from Ofwat that swaps are not seen as legitimate risk management tools for the sector. This may risk the sector following this 'signal' and making less use of swaps in the future, potentially leading to weaker risk management across the sector and adversely impacting costs of debt and eventually customers. Examples of beneficial use of swaps are: cross currency swaps reduce reliance on a potentially over-weight GBP market, inflation swaps enable synthetic debt issuance well matched to the regulatory model, and interest rate swaps enable a separate decision on locking in credit spreads and market rates, enabling optimisation of each element separately.

The removal of swaps (plus certain debt instruments) from the sector embedded cost of debt assessment also results in issues of a lack of transparency and accountability. It makes it very difficult for companies and other agents following the sector to be able to assess or track the resultant sector cost of embedded debt. As a result, this could mean that more challenge is applied to assessments made by Ofwat. We do not think that the proposals for an anonymised sector high level model would sufficiently addresses this issue.

Our second area of strong disagreement is with the ex-post outperformance assessment on new debt. We strongly believe that it is good regulatory practice to incentivise companies to innovate and outperform the allowed cost of new debt, and that this is aligned with customers' interests as this very quickly moves into the embedded debt position meaning that companies only keep the outperformance for a relatively short period of time and customers benefit for a longer period of time. An ex-post adjustment that effectively seeks to eliminate outperformance on new debt would blunt in-period incentives and would likely lead to a worse outcome for customers over the long term.

In addition, an ex-post adjustment would result in a lack of transparency on allowed costs and would make it difficult for companies to accurately track and assess their own performance.

We believe that Ofwat's assessment of the outperformance earned tends to overstate the outperformance actually earned for a number of reasons: a) the incorrect exclusion of cross currency swaps as described above, b) taking the full perceived outperformance on shorter dated debt without acknowledging the higher liquidity costs that are associated with raising shorter dated debt (explained further below), c) not recognising that the unusual volatility of the indices over Covid periods (due to other more Covid-impacted sectors being included in the index) may result in some short term higher outperformance that is not likely to re-occur in the future and d) focusing on the performance versus the index on day one whereas a company's performance is actually assessed versus the average index over the year. Overall we do not believe there is any compelling evidence that the expected sector outperformance on the allowed cost of new debt over AMP8 has increased compared to the position at PR19.

We would view no adjustment - in line with the CMA PR19 decision - as being the most appropriate approach, giving suitable incentives for companies to outperform on financing that would be in the best long term interests of customers. However, if an outperformance adjustment is considered absolutely necessary it should be set ex-ante as a modest, fixed amount.

Example of higher liquidity costs outweighing perceived higher outperformance:

Investment grade rated companies need to have appropriate liquidity policies to support their ratings. As a minimum most rating agencies would expect 12 months of liquidity. Going concern assessments also require similar or higher levels of liquidity. A prudent company's liquidity target is likely to be a step above the absolute minimum, say 18 months, which is in line with UU's central liquidity policy target.

What this means is that finance is generally raised 18 months ahead of the associated cash outflow and so liquidity costs are incurred over the initial 18 month period before the finance is used, equal to the difference between the yield on the finance compared to the usually much lower interest earned on the cash raised.

The effective cost of the debt including liquidity costs can be calculated by spreading the liquidity costs over the effective residual life of the finance. This means that the annualised costs of liquidity tend to be much lower for longer dated debt compared to shorter dated debt.

As a worked example we have assessed the dual tranche Thames EUR bond issued on 31 January 2022, to illustrate that much of the perceived outperformance that would be calculated by Ofwat is actually offset by liquidity costs.

As described above, on 31 January 2022 Thames issued both a 6 year EUR denominated bond at a GBP yield excluding fees of c2.18% and a 10 year EUR denominated bond at a GBP yield excluding fees of c2.42%. On 31 January the average yield on the average of the A and BBB iBoxx index was 2.825%, with a further fixed 0.10% being allowed for transaction costs and liquidity.

From Ofwat's current calculation of outperformance these bonds would be assessed to outperform the index by 25 to 50 basis points even after correcting for the missing cross currency swaps. However, when the higher liquidity costs associated with issuing shorter dated debt are factored in as per the example set out in Table 2, it can be seen that liquidity costs fully offset the perceived outperformance and that the current methodology used by Ofwat is likely to overstate new debt outperformance by excluding the impact of the associated higher liquidity costs.

Table 2 - Perceived outperformance is offset by liquidity costs

	Maturity	Yield	Deposit rate (Bank of England base rate on 31 Jan 2022)	Assumed liquidity policy	Liquidity costs	Residual bond life	Annualised liquidity costs	Effective yield including liquidity costs
	A	B	C	D	E=(B-c)*D	F=A-D	G=E/F	H=B+G
6 year bond	6yrs	2.18%	0.25%	1.5yrs	2.90%	4.5yrs	0.64%	2.82%
10 year bond	10yrs	2.422%	0.25%	1.5yrs	3.26%	8.5yrs	0.38%	2.81%

All of these costs are in addition to the increase in refinancing risk that is associated with raising shorter dated debt.

Other areas of disagreement are set out below.

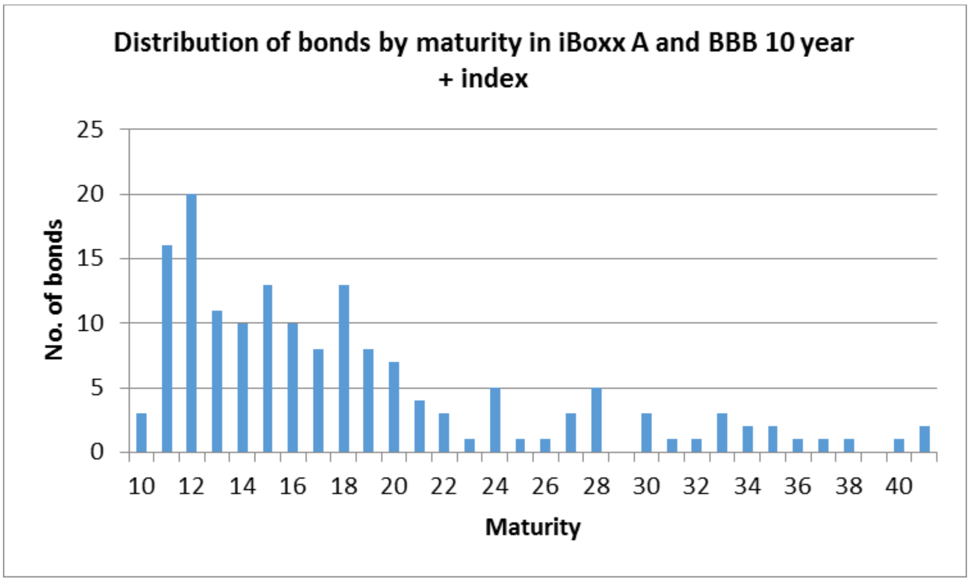
- We disagree with the exclusion of certain debt instruments from balance sheet cost of debt calculation. Whilst we can understand the exclusion of overdraft and committed facility fees (but not drawdowns) as these should be compensated through any transaction cost and liquidity allowance, we disagree that other debt instruments should be excluded. In particular, as intercompany loans and holding company debt are required to be on arm's length terms we cannot see a compelling reason to remove this category of debt. We also disagree that junior / subordinated / class B debt should be excluded as the presence of this higher cost debt enables cheaper cost class A / senior debt and it would not be appropriate to take the benefit of the lower rate on one debt instrument whilst excluding the higher rate on the associated debt instrument.

- We have some concerns that a number of the methodologies proposed by Ofwat cumulatively result in a notional company that is increasingly not representative of the sector in general nor of any company in particular, and that therefore 'sector average' calculations on cost of debt and financeability testing is becoming less meaningful or representative. Under this category we would include a) the exclusion of swaps and certain debt instruments from the sector cost of embedded debt, b) the proposed weighting on the 'actual-notional' cost of debt as opposed to the sector's actual position, and c) the 'notional' and the 'notional-actual hybrid' approaches in setting the proportion of new debt. These apparently small changes in methodology create a propensity to be selectively applied in order to achieve a downward pressure on the allowed cost of capital as opposed to taking an overall balanced approach that is genuinely reflective of the sector in general.

- We disagree with a number of the concerns raised by Ofwat in relation to index cross checks. In the draft methodology Ofwat notes that it views the indices as not reflecting a diversified issuance strategy and also having a longer weighted average maturity than the water sector in recent years, with the underlying concern being that the notional company would necessarily outperform the index.

  We disagree that the iBoxx indices do not reflect a diversified issuance strategy, as the index yield is made up by a range of debt instruments with diversified maturities. This can be seen in Figure 2, which shows the maturities of each of the constituent bond members of the index as at 18 July 2022. Also the average maturity of the indices (c19 years) is skewed by a few very long dated bonds and the median maturity of the indices is actually 16 years being much closer to the water sector position:

Figure 2 - Distribution of bonds by maturity in iBoxx A and BBB 10 year + index



Further in relation to the concern that bonds with a maturity below 10 years are not included and that therefore the higher 'outperformance' on such bonds are not captured, we have shown above that liquidity costs are materially higher for shorter duration bonds and therefore it would be wholly inappropriate to 'capture' this perceived additional outperformance (whether through outperformance adjustments or bootstrapping of indices) without also including significantly higher liquidity costs (in addition to refinancing risk), which in our view fully offset each other.

We also disagree with the proposals to potentially use a collapsing trailing average of the iBoxx indices to calculate the embedded cost of debt cross check. Costs of debt were significantly higher prior to 2010 and most of the sector still has significant amounts of fixed rate debt from those time periods on their balance sheets. Therefore we believe that instead of reducing down the trailing average there are strong arguments that the trailing average should actually be extended beyond 15 years instead. We note that whilst debt issued prior to 2010 may still be present in the iBoxx indices (as it is the traded yields that are represented by the index as opposed to the yield at issuance), the iBoxx indices only capture the higher pre-2010 yields if trailing averages extend back to those dates.

Finally, not only do we disagree with the concept of the index cross check being an upper limit to the sector cost of embedded debt assumption (as opposed to a more general cross check), but we also disagree with any 'outperformance' adjustments being made to the indices as part of the cross check. We believe that that a 15 year (or longer) trailing average of the indices should be used (i.e. no methodological changes such as the collapsing trailing average or bootstrapping methodologies mentioned). If such adjustments were made to the index cross check it would make issuance in line with the index unachievable for companies in the sector and therefore inappropriate for use as a cross check.

- Similar to our comments on risk free rates in response to question 7.4, we disagree with such a long averaging period of 6-12 months (particularly the long end of the range) as is proposed in relation to the initial cost of new debt. Arguably using the same duration averaging period as for the risk free rate would make most sense. However, we recognise that this will be trued up by the debt indexation mechanism and is therefore not a significant assumption.
- In relation to Ofwat's proposals to retain issuance and liquidity costs at 0.10%, we note that similar 'borrowing costs' were set at 0.25% by Ofgem in the RIIO-2 ED2 draft determinations and believe there is merit in increasing these costs at PR24.
- Sector embedded RPI-linked debt is likely to be a feature for many years. This debt was typically issued in the period prior to the 2008 global financial crisis and is long duration so there will be a need to effectively include this debt in a CPIH-real cost of debt assessment. We would highlight that proposed RPI reform (whereby the Government intends to align RPI with CPIH from 2030) might have no impact on the economic cost of such RPI-linked debt, as it will depend on the specific terms of the relevant debt with regard to whether compensation (e.g. a coupon uplift) will be paid. This point is important in relation to the appropriate RPI CPIH wedge to be used to convert existing sector RPI linked debt to a CPIH real rate as part of the embedded cost of debt assumption, as in particular it will not be appropriate to use the same RPI CPIH wedge as used in the risk free rate assessment given that the terms of sector debt may differ from the terms of gilts.

Whilst we have focused on the area of disagreement in our response above, we do agree with many elements of the cost of debt assessment. We do agree with the general high-level framework for calculating the allowed costs of debt, i.e. that a single sector allowance is set for all large companies, calculated as the weighted average of new and embedded debt costs with a separate allowance for issuance and/or liquidity costs. We agree with a fixed allowance for embedded debt costs, based on a balance sheet approach (but including all swaps and most debt categories), with a cross check to the usual iBoxx indices (but as a general cross check not a cap). We also agree with the allowed cost of new debt being indexed (but not with the proposed outperformance adjustment). Finally in relation to both the cost of debt and cost of equity we agree with the use of a long term assumption of 2% for CPIH, albeit the RPI/CPIH wedge will need to be separately assessed for embedded RPI-linked debt.

Q7.6 What are your views on the options we have set out for estimating the RPI-CPIH wedge for converting RPI-linked yields to a CPIH basis?

Response: *Strongly Agree / Agree / Neither agree nor disagree /* ***Disagree*** */ Strongly disagree*

Whilst we do see some merits of the proposed 'official forecasts' methodology, it is not yet appropriate to assume that the RPI inflation rate will equal the CPIH inflation rate with 100% probability from 2030 onwards as there remains material uncertainty surrounding the reforms at this point.

Given the volatility in current forecasts, we don't think that it is appropriate to be prescriptive on methodology at this point nor to use the 'official forecasts' methodology in isolation. An assessment of a wider range of metrics would be more appropriate, potentially also including evidence from the 'inflation swaps' approach.

Further, as mentioned in our response to Q7.5, a different RPI-CPIH wedge will be needed for the embedded cost of debt assessment to reflect the potentially different terms of sector RPI linked bonds compared to gilt terms.

Q7.7 Do you agree with our proposed approach to the notional structure and setting allowances for corporation tax?

Response: *Strongly Agree* / ***Agree*** / *Neither agree nor disagree* / *Disagree* / *Strongly disagree*

Overall we agree with the proposed approach to setting allowances for corporation tax on the basis of the notional financial structure or the company's actual gearing if higher. However, it is important for tax purposes that the balance between the 'cash' and 'non-cash' elements of index linked debt are accurately assessed as this is an important driver of the amount of tax calculated for the notional company.

In particular, the split of RPI and CPI/H debt along with the relevant short term forecasts for both RPI and CPI/H are important to be modelled accurately, such that the appropriate 'cash' and 'non-cash' split of costs is accurate. UU and the sector more broadly still has a large proportion of RPI debt, even more so if inflation swaps are disregarded (as a large amount of the sector CPI linked debt has been achieved via the use of swaps), therefore the notional company financial structure will need to assume a large proportion of embedded RPI linked debt. Similarly it will not be appropriate to assume material amounts of new CPI/H linked debt in the notional company financial structure.

We note specifically that the short term inflation assumptions used for the purposes of carrying out financeability assessments in the financial model will need to include a specific AMP8 RPI Inflation forecast and that the same RPI/CPIH wedge as used for the risk free rate in the cost of equity assessment is not appropriate for use in the short term financeability inflation forecasts as these are short term in nature, whereas the RPI CPIH wedge used in the risk free rate is long term in nature and would be materially incorrect.

Whilst not included as part of the draft methodology consultation, we remain of the view that all water companies should be paying their fair share of tax. Ofwat should support and incentivise the sector paying appropriate amounts of tax by including an incentive for companies that hold the fair tax mark.

8. Aligning risk and return: Financeability

Q8.1 Do you agree with our approach to assessing financeability?

Response: *Strongly Agree / Agree / Neither agree nor disagree /* ***Disagree*** */ Strongly disagree*

PR24 financeability testing has a greater focus on the notional company away from the actual company compared to PR19. Ofwat should not only be concerned with the notional company but also with actual company financeability, as this will ensure that responsible, efficient and well-run actual companies should be able to be financeable and will also provide a reasonable cross check that the notional company is not inappropriately specified. Therefore we think that both notional and actual company financeability assessments should be required.

Our main area of disagreement is whether the notional company financial structure and modelling is actually representative or achievable by the sector in practice and as a consequence whether notional financeability testing actually gives meaningful results or comfort as to the financeability of actual companies in the sector:

- As mentioned in our response on the cost of equity, we are principally concerned with proposals to reduce the notional gearing assumption, which would result in an inappropriately low gearing assumption that is not reflective of the sector or actual companies. This would flatter the credit metrics within the financeability assessment, which will not be achievable by nor representative of the sector in general nor any actual company. This will weaken the ability for the notional financeability assessment to give meaningful comfort that the proposed price control is indeed financeable.
- In addition, a number of elements of the cost of debt methodology introduce a further gap between the notional company and the sector, with assumed costs that may not be achievable even by a responsible / efficient / well run actual company, e.g. exclusion of swap and debt information, use of 'actual-notional' methodologies that are not necessarily representative of the sector, etc. These assumptions would tend to flatter the notional company financeability assessment.
- We also disagree that the notional company would be able to raise a material amount of new CPIH debt over AMP8 especially if inflation swaps are excluded for the notional company as a large proportion of existing CPIH linked debt has been raised synthetically via swaps. Again such assumptions flatter the notional company financeability assessment.

Whilst it is not explicitly mentioned in the draft methodology, the real world impacts of DPC on companies' financial ratios also needs to be reviewed, in line with prior correspondence between UUW and Ofwat.

Aside from concerns around the overreliance on a notional company that may be specified inappropriately, we do generally agree with the approach to assessing financeability with a few exceptions:

- We agree with the proposed target minimum credit rating level of Baa1/BBB+ for financeability testing, and that financeability assessments should be performed before any PR19 reconciliations or true-ups.
- We generally agree with the proposed financial metric package with a few exceptions as detailed in our answer to question 8.2.
- Whilst we generally agree that trends in credit metrics and overall position is more important than a single year below ratio thresholds, given the increased focus on credit ratings in relation to water sector resilience any financeability assessment should not place credit metrics at the ratings cliff edge (being just in line with the minimum required thresholds), but should give an appropriate amount of headroom above the minimum threshold for the relevant target rating.
- We agree that board assurance should be provided on notional company financeability, but we think that this should be extended to include the actual company as well to provide a cross check to the function of the notional company financeability testing.

- We disagree with the over-reliance on equity issuance as the only solution to financeability constraints as detailed in our answer to question 8.4.

Q8.2 Do you agree with the focus on the metrics outlined in section 8.4 for the assessment of financeability?

Response: *Strongly Agree / **Agree** / Neither agree nor disagree / Disagree / Strongly disagree*

Whilst we generally agree with the proposed metrics in section 8.4, as we have consistently represented over time, we disagree with the use of the non-'alternative' versions of the FFO to debt and ACICR ratios and view the 'alternative' version of these ratios as being most appropriate as they more closely represent the ratios that credit rating agencies use in practice. As a consequence we disagree with the proposal that most weight should be put on non-'alternative' ratios and instead the 'alternative' metrics should be the primary focus of any financeability assessment. In particular it would be inappropriate to use rating agency published thresholds for ratios that do not follow the rating agency calculation methodology.

The most material issue is our above disagreement with the use of the non-'alternative' FFO to debt and ACICR ratios, but there are also some smaller areas of disagreement:

- The ACICR ratio should use gross interest expense before indexation as opposed to the current use of net interest expense before indexation. Similarly the FFO to debt ratio should have gross interest expense deducted from FFO as opposed to the current use of net interest expense;
- Developer income within revenue should be stripped out from the FFO calculations that feed in to the FFO to debt and ACICR ratios, i.e. the line 'other income (including 3rd party income)' should not be added back to FFO;
- The ACICR ratio should reverse any bill profiling adjustments; and
- It is not currently clear how indexation on index linked swaps is treated in the financial model, however, irrespective of whether indexation on swaps is reported within fair value, in financial ratios it should be treated as per indexation on loans and bonds, i.e. included in interest expense including indexation and the cumulative swap indexation should be included in debt balances.

Q8.3 Do you agree with our proposed approach to cost recovery, in particular that we set a narrow range for RCV run-off rates within which companies will be required to evidence their choice of rate which best achieves a fair balance between current and future customers?

Response: *Strongly Agree / Agree / Neither agree nor disagree / **Disagree** / Strongly disagree*

We agree that it is reasonable for companies to present Ofwat with sufficient evidence to support their proposals for RCV run-off rates, but we do not support those rates being set (albeit within a narrow range) by Ofwat. Company asset bases are not identical, and reflect:

- Regional operating circumstances (e.g. different topographies and mixture of infrastructure and non-infra assets);
- Historic investment requirements (e.g. differences in environmental sensitivity, leading to more/less additional treatment assets); and
- Management choices in how best to achieve outcomes (e.g. make vs. buy decisions).

This means that companies will have unique and individual asset bases and hence different levels of required depreciation (and hence RCV run off). We would support an approach that it should be for each company to provide sufficient convincing evidence of whatever the correct run rate should be, but otherwise will have Ofwat apply its own assumption (which should be uniquely assessed for each company, and not be a single industry assumption).

Q8.4 Do you agree with our proposed approach to resolving a financeability constraint?

Response: *Strongly Agree / Agree / Neither agree nor disagree /* ***Disagree*** */ Strongly disagree*

We consider that Ofwat's outlined approach has too narrow a focus on equity raising as a means of solving financeability issues.

We agree that equity raising has a potentially significant role in solving financeability constraints. However, notional company equity issuance is only really appropriate to support future material RCV growth, not to solve general ratio restrictions and in particular not to offset cash flows that are too low nor as a 'fix' to keep notional gearing static. An efficiently run company would not be in a position to frequently seek to issue equity and, furthermore, market conditions may mean that equity is not always be available. Therefore we would argue that only a one-off equity raising to cover equity support for a much larger than usual investment programme with allowed equity issuance costs would be a reasonable assumption.

We disagree that there should be a presumption that gearing should not increase materially from the opening level. Where an increase in gearing over the price control period still enables the notional company to be financeable, then this should be acceptable.

In addition, any assumed equity raising should reflect reasonable restrictions that companies face in reality. There are many benefits to listed companies but equity cannot be raised 'on the drip'. Furthermore, stable dividend policies are important and minimum acceptable dividends should be a large proportion (if not all) of the real element of the cost of equity as the non-cash inflationary element is already 'retained' to support investment. We note that this retained non-cash inflationary element of the cost of equity is already in practice a significant element of equity support for investment programmes.

Where equity issuance is assumed, issuance costs should be allowed with 5 basis points being a reasonable level. However, as equity can only reasonably be raised in larger one-off tranches for listed companies, this will result in larger amounts of cash being held impacting costs of carry / liquidity costs. On this basis where equity issuance is assumed for listed companies this should include an additional allowance for costs of carry / liquidity costs.

Equity issuance however, is not an appropriate solution to all financeability constraints and should not be used to address generally low cash flows. Adjustments to PAYG ratios and / or RCV run off rates remain an appropriate tool to address financeability constraints and can be very effective in relation to constraints focused on FFO to debt. Further, PAYG ratios and / or adjustable RCV run off rates were specifically introduced to give flexibility for use in addressing financeability constraints and restrictions on their use at this point seems counter-intuitive.

9. Promoting financial resilience

Q9.1 Do you agree with the proposed standard set of scenarios for testing financial resilience?

Response: *Strongly Agree* / ***Agree*** / *Neither agree nor disagree* / *Disagree* / *Strongly disagree*

We agree that the proposed common scenarios represent a set of plausible common scenarios to be modelled. We believe that higher extremes of inflation and bad debt compared to the PR19 common scenarios are more viable given the current volatile inflationary environment (and subsequent cost of living position).

Whilst the scenarios are relatively high-level, we thought it would be worth clarifying how we intend to apply these common scenarios:

- Inflation scenarios – We plan to assume inflation is applied broadly across the overall basket of measures and not weighted towards any specific elements, such as power or housing (which would result in very different modelled scenarios)
- Cost of new debt – We plan to assume that our new cost of debt is 2% above forecast market interest rates (including any iBoxx indices) and as such there would be no true-up applied to AMP9 under any cost of new debt recovery mechanism.
- Totex underperformance – We plan to assume any totex overspend is spread across both opex and capex (e.g. in line with our projected overall split of total totex spend).

Q9.2 Do you agree with our approach to how the Board of the company should approach its Board assurance statement?

Response: *Strongly Agree* / ***Agree*** / *Neither agree nor disagree* / *Disagree* / *Strongly disagree*

We broadly support the approach that Ofwat sets out for how the company Board should approach its Board assurance statement and agree that it is important that Boards demonstrate clear ownership of the assurance processes that support the submitted plan.

Q9.3 Do you agree with our proposed approach to dividend policies, performance related executive pay and voluntary sharing of financial outperformance?

Response: *Strongly Agree* / ***Agree*** / *Neither agree nor disagree* / *Disagree* / *Strongly disagree*

We broadly agree with the proposed approach to dividend policies, performance related executive pay and voluntary sharing of financial outperformance. We consider that Ofwat's proposed approach for PR24 is broadly aligned to many of the principles underpinning UUW's actual approach at PR19.

We consider that companies should adopt a responsible approach in view of any realisation of outperformance opposite the final determination. At PR19 we made clear commitments about how the Board would approach payment of either base dividends or outperformance dividends. In particular, we set out a global mechanism which sought to ensure that – where outperformance ultimately translated to dividend payments which were much higher than envisaged in the business plan – customers would receive additional benefits (either through lower bills or through community projects) to ensure they also benefitted from the outperformance. In practice, for AMP7 to date, outperformance of the determination has been retained in the business and invested for future customer service and environmental benefits. Our outperformance in this context reflects the aggregate of all sources of outperformance including financial outperformance, ODI performance, totex savings and higher than expected inflation. We believe there is scope for the PR24 methodology to go further in this regard, potentially extending the cap and collar on ODI outperformance to take into account all sources of out or under-performance of the determination.

On executive pay, we consider that our approach to performance related pay shows a clear link to performance delivery for customers and the environment and, as in AMP7, we will look to refine this further through AMP8. We agree that Boards should regularly review targets and use the full range of discretion to ensure that performance pay rewards stretching targets in view of a broad range of information. This includes the targets embedded in the business plan, challenges applied to the business plan in the final determination, sectoral performance and new information and other issues which may arise and should be taken into account. The Remuneration Committee retains and exercises discretion to adjust outcomes where it deems this appropriate for specific or overriding issues. It is important to note that whilst the Final Determination is a significant consideration in determining stretching performance, remuneration targets need to be set dynamically in order to calibrate performance and act as a strong incentives. This provides flexibility to build in new and emerging issues during the AMP (such as the incentives now being applied to management on our Better Rivers: Better North West targets) and also to ensure that targets remain appropriate and stretching during the performance period if – for example – there were a miscalibration in the price determination package.

It should be noted that corporate governance principles require substantial engagement with shareholders and other stakeholders, including employees, when proposing and obtaining approvals for executive performance pay arrangements. We will consider what steps can be taken to manage in tandem the delivery of executive performance pay proposals through the PR24 process whilst recognising the role that other stakeholders, and ultimately shareholders play in the development, approval or rejection of the final arrangements put in place. Additionally, we note that listed companies are required to agree new remuneration policies with shareholders at least every three years. This necessarily means that the policy-setting cycle does not provide for a remuneration approach that can be fixed for a whole five-year AMP period, with shareholders always having the opportunity to require changes at some point during an AMP depending on when a policy is initially set.

10. Companies' PR24 submissions

Q10.1 Are the PR24 submission requirements clear and sufficiently specified?

Response: *Strongly Agree / **Agree** / Neither agree nor disagree / Disagree / Strongly disagree*

We welcome Ofwat's proposed submission requirements for PR24 and consider they provide sufficient clarity to enable companies to continue developing their PR24 Business plans prior to further guidance provided within the final methodology. We consider the approach proposed is in keeping with our approach at PR19 and should enable consistency in companies' submissions whilst allowing opportunity to differentiate.

We recognise the efforts taken by Ofwat to align table formats with companies' annual performance reports and grouping of tables into subject areas. As requested, at this stage we have not provided detailed observations on the data tables and as such look forward to further engagement as the methodology is finalised.

We note that the final methodology will set out in detail the extent and timing of any additional requests for early data submissions. It will be important to understand to what extent Ofwat requires these early submissions to be subject to the same level of assurance and governance outlined in section 10.9.

Q10.2 Is any data missing, or included but not required or areas we need to look at again?

Response: *Strongly Agree / Agree / **Neither agree nor disagree** / Disagree / Strongly disagree*

Whilst we have nothing significant to identify at this stage, we suggest that Ofwat continues to take feedback on the data tables (perhaps up to a specified point, a few months following publication of the final methodology). There is much insight to be gained from companies fully utilising the data tables and financial model, which will be helpful to support smooth operation of the PR24 submission process.

Q10.3 Are the limits on the number and size of documents workable? Should we be more prescriptive in terms of file and folder structures etc?

Response: *Strongly Agree / **Agree** / Neither agree nor disagree / Disagree / Strongly disagree*

Overall we agree with the limits proposed to the number of documents and 25MB file size limitation.

We welcome the clarity provided in relation to file and folder structure, although we note specifically that should the existing Ofwat SharePoint site be utilised for PR24 submissions then a level of archiving would be beneficial to avoid any confusion with prior submissions.

Q10.4 Do our expectations for company board's assurance and governance arrangements provide enough guidance to ensure that boards have sufficient level of 'ownership' and so ensure a high quality submission?

Response: *Strongly Agree / **Agree** / Neither agree nor disagree / Disagree / Strongly disagree*

We broadly agree that the expectations for company Boards' assurance and governance arrangements provide enough guidance to ensure that boards have a sufficient level of ownership to determine that the submission is of high quality.

There may be elements of the specific areas of assurance plans that Boards may need to submit on an anticipated basis, rather than a concluded basis: for example, at the point of submission it may be premature to expect that Boards will be able to certify that the company has "put in place measures to ensure that [the plan and expenditure proposals within the plan] can be delivered." However, it would be reasonable to expect that Boards would have a reasonable expectation that the plan and expenditure proposals should be deliverable, subject to the terms of the Final Determination and contractual arrangements that may follow.

Likewise, it may be that certain elements of specific board assurance could be in conflict to some degree. In those circumstances we would expect that the Board assurance statement would note these conflicts and the steps the company has taken (and/or is taking) to resolve them.

Q10.5 Do you agree with our proposal to continue to apply revenue adjustments for past performance across all years of 2025-30, after the financeability assessment?

Response: *Strongly Agree / Agree / **Neither agree nor disagree** / Disagree / Strongly disagree*

We are happy to support this as a standard assumption, however we also believe that companies should be invited to make suggestions about deviations from this, which Ofwat should consider.

Q10.6 Do you agree with our proposal for 2024-25 blind year adjustments? Should we treat in period ODI adjustments in the same way as other blind year adjustments or retain the approach set out in the Rulebook?

Response: *Strongly Agree / Agree / **Neither agree nor disagree** / Disagree / Strongly disagree*

We support the general approach to blind year adjustments, but for ODI adjustments we suggest that Ofwat retains the option to apply its approach from PR19, but only where companies provide reasonable evidence to support its forecast performance in 2024/25. If a company is unable to do so, then Ofwat should default to its draft methodology proposal.

Q10.7 Do you have any comments on how to best deal with the impact of shadow and non-shadow reporting in table BIO3 on other tables?

Response: *Strongly Agree / Agree / **Neither agree nor disagree** / Disagree / Strongly disagree*

We would recommend the inclusion of an additional two lines in table CWW2 "Base expenditure analysis - wastewater network + and bioresources" to reflect the shadow reported values for AMP7 for sludge liquors (4K.21) and total base operating costs (4K.22). This will allow us to see the trend in base operating costs on a consistent basis with the AMP8 business plan forecasts.

Q10.8 Do you have any comments on the data we should collect in table BIO5?

Response: *Strongly Agree / Agree /* ***Neither agree nor disagree*** */ Disagree / Strongly disagree*

The format and content of the data provided in table BIO5 should be informed by the issues raised in, and responses received from, the December 2021 Bioresources consultation ("Our proposed approach to funding Bioresources activities at PR24" published 9 December 2021) including:

- Basis of current cost accounting - one of the considerations in the consultation (page 20) was whether MEAV and depreciation data should be provided using a 'full current cost accounting' or a 'lighter touch current cost accounting' approach. In the consultation, Ofwat preferred a lighter touch approach based on the RCV revaluation. There is material difference between these two bases as the latter was based on the hypothetical rather than actual assets. For example, we excluded valuations for pipeline assets that would no longer be built by either an incumbent or new entrant and included valuations for additional assets at other sites currently using our existing pipeline.
- Average asset lives – if the asset lives are averaged across categories and/or sites there is a risk of an inaccurate estimation of Current Cost Depreciation (CCD). As noted in our response to the consultation, using an average asset life for all sites compared to a specific asset life for each site resulted in a materially higher CCD charge. Similarly, a simple weighted average asset life will understate CCD, as shorter life assets are replaced more frequently than longer life assets. Assets and expenditure will need to be categorised at a sufficiently granular level to ensure the CCD calculation is materially accurate.

Other issues that should be considered in designing BIO5 include:

- Will a revised asset valuation be required? The last full asset valuation was completed for PR09 based on March 2008 data. If a 'full current cost accounting' approach is adopted will companies be required to update this valuation?
- How will capital expenditure for the period to 2030 be reflected? A mechanism for calculating the CCD on new capital expenditure will need to be included and will need to be sufficiently granular to ensure a reliable calculation of CCD. As noted above, a weighted average asset life could materially misstate the CCD charge. Categorising the expenditure by asset life categories (Very short, short, medium etc.) would improve the accuracy compared to a single weighted average asset life.
- How will Assets Under Construction (AUC) be included? The table calculation should include the impact on CCD of expenditure incurred but not yet commissioned.

11. Encouraging quality and ambitious business plans

Q11.1 Do you agree with the framework we propose to encourage the best business plans? Specifically, do you agree

- **that we should first assess 'quality' followed by 'ambition'?**
- **with our proposed allocation of rewards and penalties for performance on each?**

Response: *Strongly Agree / Agree /* ***Neither agree nor disagree*** */ Disagree / Strongly disagree*

We generally agree that companies should first demonstrate that their business plan submission meets the requirements set by Ofwat and that the quality of the submission is assessed comparatively to others.

The proposed assessment of quality appears to recognise companies need to meet a set of minimum set of expectations in order to be considered for assessment on ambition but does not seek to recognise or reward those companies exceeding the quality criteria specifically.

We welcome Ofwat's efforts to strengthen the financial and procedural and broadly support the proposals made on each.

Q11.2 Do you agree with the proposed scope of our 'quality' assessment? Specifically, do you agree:

- **we should have minimum expectations in the six areas described above?**
- **with the minimum expectations we specify in each of the six areas?**

Response: *Strongly Agree /* ***Agree*** */ Neither agree nor disagree / Disagree / Strongly disagree*

The proposed assessment of quality appears to recognise companies need to meet a set of minimum set of expectations in order to be considered for assessment on ambition but does not seek to recognise or reward those companies exceeding the quality criteria specifically. However, we urge Ofwat not to over-specify the quality requirements, and to carefully consider:

- Whether a quality requirement may prevent a company making a reasonable proposal that may be in the best interest of customers – e.g. the number of bespoke performance commitments. If Ofwat sets a strict number limit, within its quality test for outcomes, then companies may not reveal potentially valuable proposals, which could be of significant benefit to customers or the environment.
- Whether it is reasonable for companies to make representations which may run counter to the final methodology but which are necessary elements for the Board to provide assurance that the plan meets necessary thresholds. For example if – in order for the Board to confirm that its business plan meets the necessary thresholds for financeability, resilience, affordability and deliverability of statutory obligations, but that in order to deliver this it needs to include an element which is at variance with Ofwat's methodology, we consider that Ofwat should consider the balance of evidence before determining whether the plan meets the quality threshold.

In summary, where a company includes an element of a business plan which might conflict with Ofwat's methodology, but does so intentionally and on a well justified basis, then we do not consider this this necessarily means the plan is of low quality; Ofwat should make a judgement about quality in the round. This approach provides the best possible scope for companies to submit strong, well-considered and innovative plans backed by the most appropriate evidence and which can reflect dynamic conditions that may arise after publication of the methodology. We do not believe it would be reasonable for companies to operate under the threat of automatic penalties if they reveal the most appropriate plan they would wish to submit. This would have a chilling effect on potentially valid representations that Ofwat should be aware of and that company Boards may wish to make. In this regard, for example, we welcome that in its Risk and Return tests, Ofwat allows for companies to present alternative evidence for the allowed return on capital. We consider that this approach should be welcomed more broadly, providing that companies use this on a responsible basis.

Q11.3 Do you agree with the proposed scope of our ambition assessment?

Response: *Strongly Agree* / ***Agree*** / *Neither agree nor disagree* / *Disagree* / *Strongly disagree*

In general we understand and agree with what Ofwat expects in this area. However, we note that any comparative assessment of ambition between company business plans should also reflect evidence that delivery of that ambition is credible. This should be based on both prospective evidence of a delivery plan, as well as support from the company's track record of delivery.

Q11.4 Do agree with our proposed reputational, financial and procedural rewards and penalties, including the overall package of reward and penalty?

Response: *Strongly Agree* / *Agree* / ***Neither agree nor disagree*** / *Disagree* / *Strongly disagree*

We welcome Ofwat's efforts to strengthen the incentives available to companies to submit quality and ambitious business plans and recognise the combination of reputational, financial and procedural measures proposed. However, we note that the increase in incentive power being provided has mostly been achieved by introducing penalties, rather than increasing opportunity for rewards. As well as placing a downwards skew on the expectation value of company returns, it is highly likely that companies will not wish to receive penalties, but Ofwat may wish to consider whether that could lead to an undue level of compliance, at the expense of companies making more risky proposals, which may ultimately have been to the benefit of customers and the environment.

We support the intention to protect companies that achieve the highest categorisation from potential reductions in the allowed return on capital and base cost allowances between draft and final determinations.

Q11.5 Do you have any other comments regarding our proposed approach to business plan incentives at PR24?

Response: *Strongly Agree* / *Agree* / ***Neither agree nor disagree*** / *Disagree* / *Strongly disagree*

We note specifically Ofwat's desire to reward companies 'first submission' and by exception it may move a company out of the lowest categories. We would welcome Ofwat providing further guidance on the level and nature of engagement companies should expect during the period following submission of the business plans and prior to the announcement of Ofwat's categorisation and draft determinations. It would also be helpful to understand the proposed timing of Ofwat's draft determinations during 2024.

12. Appendix 6 - Performance Commitments

Q12.1 Do you have further views on whether the proposals laid out for C-MeX are appropriate?

Response: *Strongly Agree / Agree / Neither agree nor disagree / **Disagree** / Strongly disagree*

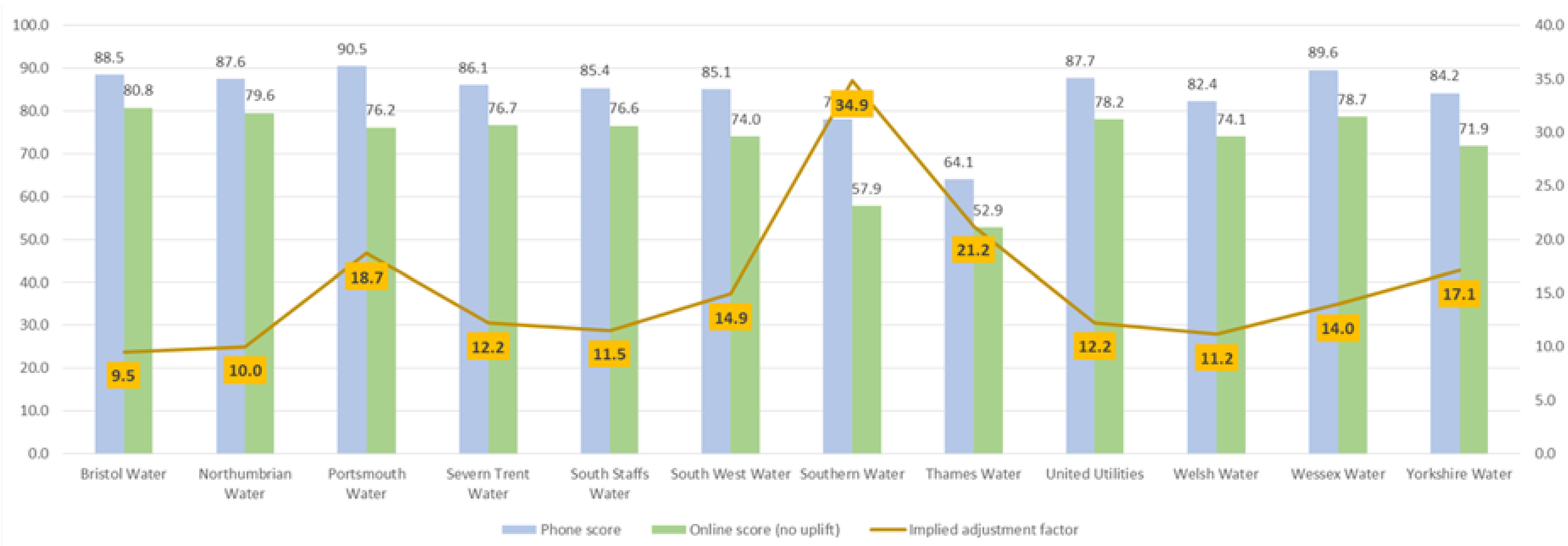
We believe that the C-MEX challenge process should be retained. As evidenced in our PR19 submission on C-MeX design, for the C-MeX incentive to remain effective it is important that the uncertainty ranges in survey results not exceed actual variances in companies' service levels, otherwise incentive properties will be undermined, as companies observe that improvements to customer service levels no longer result in predictable improvements in survey scores. The C-MeX survey already experiences a higher than desirable degree of inaccuracy as a result of relatively small sample sizes, and companies' scores clustering around a narrow performance. The challenge process is an important mechanism for helping to reduce random noise in C-MeX surveys, and its removal will further undermine the credibility of the mechanism In 2021/22 for example, we raised 5 challenges, with 4 being accepted as legitimate, impacting reward calculations for United Utilities by around £600,000. These challenges are raised where obvious and clear errors in scoring have occurred. The impact of these changes is material in terms of final C-MeX rating, and overall reward calculations. Removing the challenge process will therefore demonstrably increase uncertainty C-MeX surveys, and avoidably degrade incentive strength.

We do not believe it is necessary to mandate the introduction of further customer contact channels as there are already clear incentives to offer customers the contact channels of choice. If a company is offering an inadequate range of contact channels then it would be expected that customer dissatisfaction would be naturally reflected in companies' C-MeX scores.

We also believe that the digital correction factors should be reviewed based on the latest evidence on the difference between voice and digital channel customer scoring. Based on industry datashare, our own C-MeX survey scores over the last year we believe the mechanistic difference between the average voice contact and digital contact is 16%, as compared to the current 5% adjustment factor (see Figure 3). Uplifting the adjustment factor to this higher level will correct for the established tendency of digital contacts to score slightly lower than voice contacts, and ensure that companies remain incentivised to pursue best value contact channel options.

Our reassessment of the digital adjustment factor is limited to UU only data, as we do not have access to all companies base C-MeX survey results, but the simple methodology set out above could easily be applied to all company response data by Ofwat, or others if all companies' base data were shared.

Figure 3 - Billing scores, % gap between phone and online satisfaction (source: APR 2021-22)



Q12.2 Do you agree that C-MeX needs to adapt to provide better service to vulnerable and worse served customers?

Response: *Strongly Agree / Agree /* ***Neither agree nor disagree*** */ Disagree / Strongly disagree*

We agree that strong incentives to support vulnerable and worst served customers are important. However it is currently unclear how C-MeX could best be adapted to achieve these outcomes. It may be the case that alternative regulatory incentives would be better placed pursue the goals of protecting worst served and vulnerable customers.

We are keen to engage to discuss options to improve incentives for these customer groups, whether this is through C-MeX or some other mechanisms

We plan to conduct further consultant led work looking into future options for all the MeX incentives, including developing options for protecting worst served and vulnerable customers.

Whilst we do not believe that C-MeX needs to require a specific minimum number of contact channels, there may however be merit in specifying that companies provide accessible contact channels, to ensure that as many customers as possible have any easy as possible option to contact their service provider. For example ensuring customer facing websites comply with accessibility standards.

Q12.3 What are your views on our proposal to introduce a single, combined common performance commitment ('BR-MeX') capturing the experience of both end business customers and retailers as intermediate customers?

Response: *Strongly Agree /* **Agree** */ Neither agree nor disagree / Disagree / Strongly disagree*

We support the proposals to include an incentive in this area, due to the impact wholesaler performance can have, not only on retailers, but also non-household customers. The proposed scale of the incentives would create substantial incentive to ensure good relative performance for both retailers and customers.

Of crucial importance is the detailed design of the future surveys and metrics. It is important that the metrics provided directly from non-household customers reflect wholesaler and not retailer performance. We believe that a year of shadow reporting, and time to make changes to the process of measurement is necessary to develop BR-Mex. This preparation should include focus on the differentiation of wholesaler and retailer performance.

We support the inclusion of input from both business customers and retailers. Ensuring that the combined measure includes both R-MeX and B-MeX is important in spreading the effects of limited sample size. In addition we believe that utilising multiple information sources for both metrics, where appropriate, also supports the validity of the measure.

Combining the R-MeX and B-MeX metrics, using the multiple annual surveys to create an annual assessment of performance would help mitigate the potential inaccuracies created by the relatively small sample sizes. Both the R-MeX and B-MeX metrics may have issues with the small number of sample points, given that there are only a small number of retailers able to comment on a wholesaler's performance, and often that the number of bilateral wholesaler customer interactions may be insufficient to succeed in obtaining 100 responses.

Both the R-MeX and B-MeX measures will require further work to refine the process and demonstrate the validity of the measures as being reflective of wholesaler performance. We strongly support the proposal to use the time available in AMP7 to trial survey designs, before applying the incentive in AMP8. We know that non-household customers can often find it difficult to differentiate Retailer and Wholesaler service provision, and it is likely to be a challenge to design a survey that reliable separates customers' views between the two. However it is crucial that a future metric can reliable test wholesaler service quality, without customers confusing it with aspects of retailer service, as otherwise we risk putting in place a perverse incentive for wholesalers to become concerned with on retailer service quality. Research we have undertaken with non-household customers highlighted the difficulties those customers have in differentiating wholesaler and retailer performance. If customers are unable to differentiate we would suggest that the bilateral interaction element of the measure be weighted lesser, or removed from the metric.

The current R-MeX measure is being used in comparative holistic reporting and provides a highly valuable measure of qualitative performance, without this measure, and potentially the B-MeX measure, the performance metrics and market performance framework is incomplete. Given the value of these measures we believe that the benefits of including them within both the market performance framework and PR24 performance incentives is fully justified.

Within Appendix 6 – Performance Commitments an additional metric is suggested to be added to the R-MeX measure obtaining more granular feedback through the bilateral hub. The proposal would see retailers score each interaction with a wholesaler through the hub. Without seeing in more detail how this would work we are unsure if this will provide a valuable addition to the current R-MeX measure. Therefore we would suggest that testing and considered evaluation of this new measure would be needed before adding financial incentives to the measure.

It is difficult to provide detailed feedback on the B-MeX measure as it is still early in its development. Overall, we think that a B-MeX incentive could fill important gaps in the existing regulatory framework governing water (and wastewater) companies. The focus of such a scheme should be on the qualitative aspects of services provided by wholesalers to end business customers. We suggest that the B-MeX incentive should primarily depend on evidence from surveying business customers who have had substantial recent dealings with wholesalers.

Further work is required to develop and test the B-Mex measure. Current proposals seem promising, but testing is required to validate the measure. We believe it is important that a sufficient number of customers feed into the survey and that those customers are scoring the wholesaler on the wholesaler's performance. We will be looking to engage with MOSL and the B-Mex working group to help develop this measure going forward.

Q12.4 Do you consider evidence suggests that the current water supply interruptions performance commitment is inhibiting innovation? If so please provide it.

Response: *Strongly Agree /* ***Agree*** */ Neither agree nor disagree / Disagree / Strongly disagree*

Yes, we consider that the current three hour interruption threshold inhibits innovation. As discussed in our response to the November 2021 consultation on performance commitments for future price reviews, the three-hour window impacts on our ability to deploy the most cost beneficial rehabilitation techniques available to us. It also suppresses the development of innovative solutions and products within the supply chain, due to the constrained national market in the water sector. A change to the proposed performance commitment structure, as we promote here, would therefore have a wider economic benefit to supply chain and water companies, and ultimately the end customer experience.

Some of this detriment could be avoided by amending the proposed AMP8 common PC to account for reactive and planned work separately. We would also promote that the three hour window for planned interruptions only is extended to a working day. This would enable the sector to develop more innovative and efficient asset health programmes of work to deliver long-term service resilience for customers. Allowing for longer planned interruptions is in line with customer expectations and priorities. Longer planned water supply interruptions will, in most cases, result in reduced overall disruption to customers' daily lives - trenchless solutions can be deployed for example which means less traffic management and open excavation next to customers' homes and businesses.

Focusing on a particular area – mains rehabilitation and replacement - we explain and evidence how the three hour window currently inhibits innovation.

<u>Mains rehabilitation and replacement</u>

In our November 2021 response we referred to spray lining as an innovative process which we are considering and highlighted the issues which the three hour PC window has on our use of this technology. Spray lining and other spray applied applications have been available to the water industry as a pipe rehabilitation method for over 30 years. The technology for application and approved materials has developed significantly and now includes semi-structural applications aimed at increasing life expectancy of the asset. There are a range of alternative methods for pipe rehabilitation including slip-lining and cured-in-place pipe as well as other "trenchless" pipe replacement methods such as pipe bursting.

We currently have access to a range of pipe rehabilitation and replacement technologies through our existing network partnership framework. Whilst these methods offer reduced disruption as a result of minimising the amount of above ground civils work and associated traffic management, they require set periods of time for curing and service connections to be reinstated before flow is restored. These periods are usually greater than three hours. In the current AMP period (2020-25) we typically utilise traditional open-cut methods for planned water distribution pipe replacement due to the time and cost of deploying alternative customer supplies required to meet the three hour water supply interruption performance commitment threshold. This constraint was highlighted by lining suppliers during a series of UKWIR workshops in 2021, focused on novel lining materials for potable water networks (<u>here is a link to this study</u>):

"The three hour interruption to supply performance commitment was also pointed out as a potential blocker as no current spray linings could cure in this time frame and that semi-structural pipe could not be installed in sufficient volume in three hours to make it financially viable. Although there are ways to mitigate the interruption to supply, these are often costly and results in additional digging and disruption which means that the cost benefit of lining is removed."

In Figure 4, we provide typical timelines for two different working days on mains rehabilitation and replacement - one working within the restrictions of a 3 hour water supply interruption and one with an 8 hour interruption. The most significant difference between the two options in terms of the ways of working is the time in the afternoons for preparation for the next day. This preparation allows us to be able to rehab every day instead of every other day. Under the current (and proposed) CML 3 hour window we will only ever generally rehab about 300m per week which is around a 40% reduction in output against the 500m per week under the 8 hour window option.

We have summarised at the bottom of both tables the differences between the two options. This shows that the 8 hour window working day (without CML restriction) is more productive, efficient, less disruptive to the customers' environment and has reduced health and safety risks. For these reasons, we promote that the three hour window (for planned interruptions only) is extended to a working day of 8 hours.

Figure 4 - Comparison of approaches with and without CML restriction

Rehab Mains Replacement under CML Restriction			
Shutoff	3 hours (max)		
Scope	100mts 4"/90mm slip line with circa 15 Short side service transfers		
Environment	Flagged footpath in an inner city terraced street		
Resources	5 man Rehab Team plus 2 man Part Time Grab Team		
Timeline	**Activity**	**Description of activity**	
07:30-08:00	Team mobilise on Site	Team arrive on site and set up ready for shutoff	
08:00-08:15	Shut-off Existing Main	Rehab Inspector/NT operates controlling valves and notifies team when water is isolated	Period in which customers supply is affected
08:15-08:45	Cut & Cap	Team cut into main, dewater and install temporary or permanent connections to facilitate new main and temporary overland connections	
08:45-09:00	Turn on Existing Main	Reintroduce water to existing main up to temporary or permanent connections to facilitate new main and temporary overland connections	
09:00-10:30	Commission overland connection	Commission temporary overland main by way of temporary or permanent connection points, transferring the service connections from existing main onto temporary overland connection	
10:30-11:00	Clean Main	Remove existing pipe work within main and service connection pits, pull winch rope through existing main with cobra reel , clean main by winching scrappers and plungers back through main for the number of passes as required.	
11:00-11:30	Install New Main	Winch new main (pre-chlorinated) from pipe trailer into the host main	

Rehab Mains Replacement without CML Restriction			
Shutoff	8 hours (max)		
Scope	100mts 4"/90mm slip line with circa 15 Short side service transfers		
Environment	Flagged footpath in an inner city terraced street		
Resources	5 man Rehab Team plus 2 man Full Time Grab Team		
Timeline	**Activity**	**Description of activity**	
07:30-08:00	Team mobilise on Site	Team arrive on site and set up ready for shutoff	
08:00-08:15	Shut-off Existing Main	Rehab Inspector/NT operates controlling valves and notifies team when water is isolated	Period in which customers supply is affected
08:15-08:45	Cut & Cap	Team cut into main, dewater and install temporary or permanent connections to facilitate new main	
08:45-09:00	Turn on Existing Main	Reintroduce water to existing main up to temporary or permanent connections to facilitate new main connections	
09:00-09:30	Clean Main	Remove existing pipe work within main and service connection pits, pull winch rope through existing main with cobra reel , clean main by winching scrappers and plungers back through main for the number of passes as required.	
09:30-10:00	Install New Main	Winch new main (pre-chlorinated) from pipe trailer into the host main	
10:30-11:00	Pressure Test	Install temporary end connections to facilitate 10min test	
11:00-13:30	Commission New Main	Commission new main by way of permanent connection points, transferring the service connections transferring service connections	

11:30-12:30	Pressure Test	Install temporary end connections to facilitate 10min test	
12:30-14:00	Commission New Main	Commission new main by way of permanent connection points. All connections undertaken using the control point app.	
14:00-15:30	De-commission overland connection	Transferring service connections from temporary overland connection onto newly installed main, customers advised "on the knock", affected for circa 5-10mins. All connections undertaken using the control point app.	Period in which
15:30-16:30	Team demob from Site	Team will demob from site ensuring that all water is restored, open excavations are fully secured and site is tidy	
Benefits/ Restraints:			
Typically the above will entail **3 pipe pulls Monday-Wednesday-Friday** with Saturday used as a prep day. **Output circa 300m per week as oppose to 500m with the 8hr shutoff option (a 40% reduction in output per week).**			
There is additional materials used in this option in setting up the overland connection which has a cost impact but more **significantly there is more disruption to the customers and risk of trip hazards and vandalism with the overland pipework.**			
This option minimises the timescales in which the customers are interrupted but they will be affected twice during the day.			
This option does not allow for any unnecessary delays in isolating the mains (passing valves/incorrect mains records), locating any known missing supplies due to insufficient investigation time therefore **likely to lead to more aborted shutoffs** than an 8 hr shutoff.			
This option **increases the Backfill, Reinstatement and Site Clearance timescales from 2 days to 3 days**; the backfill will be completed the following day with the Reinstatement and Site Clearance being completed on the 3rd day.			
This option reduces shut off period for the customer but has **greater impact to the customer as the works are outside the customers' property for at least a day longer**. Perhaps even more if they are located at the change point between pipe pulls.			
The above way of working does not allow time within the shut off window to react to changes. This ultimately means the overland connection is left overnight until the next day which is then often subject to vandalism and additional out of hours reactive call outs.			

		from temporary overland connection onto newly installed main. All connections undertaken using the control point app.	
13:30-16:00	Backfill	2 Man Grab Team will commence with the backfill of all open excavations	Prep time for next day
13:30-16:00	Preparation for Next Day	Rehab Team will commence with the excavation works for the following day	
16:00-16:30	Team demob from Site	Team will demob from site ensuring that all water is restored, open excavations are fully secured and site is tidy	
Benefits/ Restraints:			
Typically the above will entail **5 pipe pulls Monday-Friday** with Saturday used as a prep day. **Output circa 500m per week as oppose to 300m with the 3hr shutoff option**.			
No additional materials in setting up the overland connection and **reduced risk of trip hazards and vandalism.**			
This option increases the timescales in which the customers are interrupted but they will only be affected once during the day.			
This option allows for any unnecessary delays in isolating the mains (passing valves/incorrect mains records), locating any known missing supplies therefore **less likely to lead to aborted shutoffs** as a 3 hr shutoff may do.			
This option **reduces the Backfill, Reinstatement and Site Clearance timescales from 3 days to 2 days**; the backfill will be completed the same day with the Reinstatement and Site Clearance being completed on the 2nd day .			
This option increases shut off period for the customer but has **lesser impact as the works are outside the customers' property**.			
The above way of working allows additional time within the shut off window to react to changes on site such as missed services or blockages within the main causing extensive cleaning to be undertaken. Generally it is an exception if the process cannot be completed in the same day.			

We also observe that the three hour constraint is currently having an adverse impact on the supply chain. Contractor resource availability is reducing as pipe rehabilitation and replacement gangs prefer work with other utilities (e.g. gas) where similar short time constraints do not exist. The short time window currently available for rehabilitation does not present an attractive proposition for the supply chain, again inhibiting growth and innovation in the sector.

An example of difficulties we face in recruiting teams was presented to UUW's internal TSA (Taste, Smell and Appearance) Board in March 2022:

"Resources

- *Partners have found it very difficult to find management staff and operatives to work on the cast iron rehab programme and there has been a high turnover of people leaving after they have been on it for a week or so, this is primarily due to how we are having to work as to not affect CML (Customer Minutes Lost).*
- *The industry as a whole is struggling to find and recruit people*
    - *Contractor A - 10 adverts out for gang placements / 3 adverts for management - No Interest*
    - *Contractor B - 5 adverts for management - 3 secured, no interest in the other 2 roles*
    - *Contractor C - 10 gang placements - No Interest therefore had to sub contract the work*
    - *Contractor D - 6 adverts for management - No interest*
- *Subcontractors are really struggling to recruit / retain personnel as well"*

Given the current structure of the water supply interruptions performance commitment, planned work is mostly scheduled to be delivered within three hour windows (water supply restored within three hours of initial interruption). Planned supply interruptions exceeding this three hour time constraint account for approximately 5% of all planned work in United Utilities over the last five years. Work that exceeds this time constraint is not designed to take longer than three hours but can be affected by issues with installation and reinstatement of flow resulting in longer than intended interruptions to supply. Table 3 provides an overview of the total number of planned jobs on United Utilities water distribution network over the last three years including any rehabilitation and replacement activities.

Table 3 Total planned mains repairs and other planned work on the water network

	FY2020	FY2021	FY2022
Total no. of Planned jobs *	1430	1892	2751
Total no. >= 3 hours	67	32	95

**Planned jobs include mains repairs and other planned work on the water network*

We endeavour to carry out unplanned work within the three hour interruption window to minimise disruption to customers, but as this work is reactive by nature it means that unforeseen circumstances can impact the time to deliver this work.

Stabilising and improving the asset health of the water network is a key area of focus for AMP8. As we develop our plans for AMP8 (2025-30), we have spoken to customers in the North West to get their views on "planned interruptions". As detailed in our November 2021 response, customers told us they were supportive of longer duration planned supply interruptions if the additional time allowed for greater innovation and reduced general disruption (e.g. traffic disruption). We will continue to work with our supply chain to explore alternative and innovative methods for pipe rehabilitation and replacement to ensure we provide greater levels of long-term resilience within our water distribution networks. This will allow us to prioritise and optimise annual kilometres of pipe replacement/rehabilitation in AMP8.

A revised structure to the water supply interruptions performance commitment, allowing for longer planned interruptions in line with customer acceptance, would enable greater levels of targeted investment in asset health supporting leakage, water quality and supply interruption performance improvements.

Q12.5 Do you agree with our proposed definition for the biodiversity performance commitment?

Response: *Strongly Agree / Agree / Neither agree nor disagree / Disagree /* ***Strongly disagree***

Whilst we strongly support the principle of a biodiversity performance commitment, we have material concerns about the specific proposals put forward as part of the draft methodology. We have set these out below but would be very keen to discuss them further with Ofwat in order to refine its proposals in this area.

We consider that the PC should require that we baseline land on which we plan to have biodiversity projects, rather than baselining total landholdings. The net increase in the number of biodiversity units reported would therefore be per hectare of "*company owned land which we plan to do biodiversity work on*" – i.e. not all company owned land. To use "*all company owned land*" as the denominator would require companies to engage independent ecologists to complete a biodiversity assessment for all of their land holdings. Biodiversity is not the primary duty of a WaSC and in our view this is not the best use of customers' money in carrying out our functions as an Appointee.

The draft methodology proposal (Appx 6 section 4.1.1) requires biodiversity to "be measured by people with relevant experience and qualifications conducting site visits and using the baseline pre intervention assessment of the biodiversity metric 3.1 for each visit" and "a site visit by an independent appropriately qualified person" (Appx 7 section 3.1.1). This is an extensive and specialist assessment. To provide context to this, we estimate that a full biodiversity assessment of a hectare of land would take an ecologist one day and also a GIS mapping/survey specialist 0.4 of a day. In our experience, both specialists currently charge around £500 per day, therefore it would cost around £700 per hectare. Under the proposed PC definition, this process would have to be repeated every 4 years. The assessments can only be completed during a narrow period of late spring/summer in order to properly assess biodiversity. This means that there will be increased demand in concentrated months for specialist ecologist services, which could increase the cost. Increased demand from all WaSCs and WoCs for ecologist services, in order to meet this common PC requirements, could also increase costs. For a company such as UUW, with (relatively extensive) landholdings of 56,000 hectares, we estimate that the current cost of these surveys is c.£39.2m. Performed every 4 years, the cost would be c. £49m per AMP. We consider this cost to be too high to be an efficient or effective use of customers' money.

A lighter-touch survey method could be employed, such as the use of drones and increased use of desktop mapping services. We believe that the current PC definition could be revised to facilitate such approaches. We propose that not only should a lighter-touch ecological assessment be specified but that also only land which companies plan to improve the biodiversity of should be included in the common PC and baselined. To encourage the inclusion of land in the PC, the amount of land a company included could be included in Ofwat's BPI assessment of a company's ambition.

Water companies must already comply with the NERC Act (The Natural Environment and Rural Communities Act 2006) which prevents deterioration in biodiversity, therefore what this common biodiversity PC should instead focus on is land that companies actively want to improve biodiversity on. We proposed this approach of focusing this PC on particular land holdings, rather than all, at the biodiversity task and finish group and wish to suggest again that this recommendation - or a variant of it – should be included in Ofwat's finalised methodology. We welcome that Ofwat has reconvened this group since the publication of the PR24 draft methodology and look forward to developing Ofwat's draft proposals through the group in time for their inclusion in the PR24 final methodology.

Cost adjustment claim

Should Ofwat confirm that all company owned land is assessed for biodiversity, then we would likely seek a cost adjustment to recover the costs of this regulatory requirement (as it is an entirely new cost pressure and our understanding of current botex models is that no cost driver would adequately reflect it). Compared to the rest of the industry, UUW owns a disproportionately large amount of land that would be captured by the requirements of this common PC, the costs of which would not otherwise be reflected in historic cost models.

Frequency of assessment

We also do not understand the rationale for a 4 yearly interval for ecological assessments. We consider that there should be one assessment per AMP, by year 4 of the AMP, so that each relevant piece of land can be assessed and incentivised per AMP. At 4 yearly intervals, some land will assessed twice per AMP, some once.

What happens if companies sell/buy a piece of land?

We believe that the PC definition should be further developed so that it explicitly defines what happens when a company buys or sells a piece of land. We consider that this change in land ownership should be reflected (i.e. added or deducted) from the baseline land included in the biodiversity denominator. If it isn't, then by selling a piece of land, a company's biodiversity PC assessment may look as if biodiversity has deteriorated compared to the baseline, when in fact the change that has occurred is land ownership, not land biodiversity.

Additionally, if we choose to build a new WwTW on a piece of land included in the biodiversity assessment then the biodiversity net gain requirements and this PC shouldn't financially disincentivise such action. By choosing to develop our land, we are necessarily required to deliver no net loss on all the land and a 10% net gain on any land that requires planning permission. These gains however would be to meet the statutory requirement for planning permission so would therefore be excluded from the proposed performance commitment. If the change wasn't similarly excluded from the baseline assessment then we would be in the odd situation of incurring a financial disincentive having acted to improve the biodiversity of our land.

This links to the wider point that if this PC requires companies to conduct a high level net gain assessment, such nuances would be inadvertently included in a whole land holding assessment, however we firmly contend that they should be excluded.

Third party land

It is not clear from the proposed PC definition how third party owned land will be included in the denominator. Currently the PC definition measurement unit is "Biodiversity units per hectare of appointed business company land". The definition doesn't include third-party land that we're working on with others in partnership. However, this third party land is mentioned in Appx 6 section 4.1.1 as being included in the biodiversity assessment of improvements/detriments to biodiversity: "We propose a performance commitment that measures the change in biodiversity on company owned land and third-party land on which they are working in partnership as part of their statutory functions." If it is included in the assessment, then third party land should also be included in the denominator for the measurement unit.

Incentive rates

Ofwat's draft methodology considers the use of company specific incentive rates for the ODI attached to this common PC. We do not consider that this will be necessary if Ofwat maintains its proposals to use the upcoming biodiversity net gain market as this already considers local circumstances in the metric assessment. The Defra metric already takes into account the distinctive nature of local environments so this extra local incentive would not be required. We support Ofwat's proposals to align to the net gain market.

Price control deliverables

Following discussion in the Biodiversity Task and Finish group it was clear that Ofwat proposes to include both a PCD and a PC for biodiversity. It was not clear in our assessment of the methodology how this would be applied and we would appreciate greater detail of this approach to be discussed at the task and finish group for inclusion in the final methodology. We would also welcome Ofwat carefully considering the importance of symmetrical incentives and the relative scale of any such proposed PCD compared to the PC's ODI rate. There is no mechanism for incentivising increased biodiversity forecasts, only deterioration. We have reservations on the use of a PCD for this subject – Ofwat proposes that PCDs should be a clawback mechanism only. Any increase in the forecast of biodiversity in the long term would therefore not be rewarded (or therefore incentivised) – only deterioration in long term biodiversity forecasts would be incentivised, through a clawback of funds. We do not currently see justification for the need of a PCD and consider that the PC should offer sufficient customer protection on the matter of biodiversity.

Targets

Following discussions with the Biodiversity Task and Finish group Ofwat's intention was expressed that the biodiversity associated with WINEP objectives would be used to set the PCD and PC targets. This is based on the assessment conducted through the wider environmental outcomes of each option. Whilst the biodiversity will be assessed through this process it will not be possible to get an accurate unit calculation using the metric without detailed site assessments and a detailed design of the proposed solution. This assessment will not be completed through the WINEP stage which means that the biodiversity assessment would be largely indicative. We therefore don't believe it would be appropriate to set long term targets from this indicative information and suggest that a mechanism is needed to feed this into the target as these accurate assessments are completed through the design stage.

Q12.6 Do you agree with our proposal to have separate operational greenhouse gas emissions performance commitments for water and wastewater, which are based on a normalised measure?

Response: *Strongly Agree / **Agree** / Neither agree nor disagree / Disagree / Strongly disagree*

We agree that it is right for Ofwat and the water sector to act together to contribute to the national legal requirements for net zero 2050 and 78% reduction by 2035. PR24 plays a critical role in ensuring the sector is on the right trajectory for these targets, and working with enough pace and delivery in AMP8 and beyond. At United Utilities, we have bold and independently verified science based targets across emissions scopes 1, 2 and 3. We welcome the opportunity to focus on greenhouse gas (GHG) emissions impact within and beyond base. However, we find the detail of Ofwat's draft methodology proposals unclear.

To support net zero, we agree with Ofwat's proposal to have separate performance commitments for water and wastewater which are based on a normalised measure.

As an industry, we already report our emissions using a normalising unit (per Ml of treated water and per Ml of sewage treated) and would agree that a similar unit would be appropriate for the performance commitment. An alternative to using volumes of treated water and sewage would be to use population as a normalising unit. This would enable real emissions reductions to be shown rather than changes in treatment volumes e.g. through leakage reduction and surface water separation. When setting the performance commitment target a normalising value should not unfairly benefit or penalise companies in their emissions reduction requirements due to their geography e.g. large number of rural areas.

Across both the performance commitment and incentive mechanisms detailed in the draft methodology, we believe that the approach put forward by Ofwat has the right intentions but consistent reporting and effective and efficient carbon management deliver will need resolution of significant issues of complexity and ambiguity.. We believe that the following areas need to be considered to enable emissions reduction within company control to be reported and performance measured fairly.

Our interpretation of the GHG incentive mechanisms is set out in Table 4.

Table 4 - United Utilities' interpretation of inclusions within the GHG incentive mechanism

Category	Proposal of which GHG emissions should be included within each tier
Base expenditure reduction	Operational emissions (scope 1, 2, plus a defined subset of scope 3 emissions related to annual operational activities, which should be defined and agreed as a sector)
Standard enhancement reduction	Whole life impact[2] of enhancement projects
Net zero enhancement reduction	Whole life impact[2] of projects against a counterfactual of base or a traditional solution
Net zero challenge	Whole life impact[2] projects against a counterfactual of base or a traditional solution

Notes:

[1] Subset of scope 3 emissions should be as a minimum:

- Business travel on public transport and private vehicles used for company business
- Outsourced activities (if not included in scope 1 or 2)
- Purchased electricity – Transmission and Distribution

UU would suggest extending this subset to include all of GHG Protocol scope 3 categories 3, 5 and 6.

- Category 3 Fuel and energy related emissions (transport and distribution, and well to tank of all electricity, gaseous and liquids fuels used)
- Category 5 Waste generated in operations (including sludge disposal)
- Category 6 Business travel on public transport and private vehicles used for company business

[2] Whole life impact including embedded emissions (those associated with delivery of the capital project) and impact on operational emissions (scope 1, 2 and a defined subset of scope 3) associated with use stage of the asset(s) (to include operation, repair, maintenance, replacement and consumables). We do not propose to include decommissioning impact due to the long asset lives.

1. Performance assessment

- Ofwat has clarified that that all funded net zero benefits will be accounted for in company performance commitment levels. However, it remains unclear how the operational GHG emissions performance level will be set. We have concerns that the data available to Ofwat through APR reporting over the 3 years to final determination will not have a consistent time series and that historic costs and carbon performance will not be representative of future challenges (see section 2). The UKWIR carbon accounting workbook (CAW) used by the industry is reviewed and updated every year as emission factors evolve. Therefore emissions reported between years cannot be compared without restating to a consistent methodology. It may be preferable for Ofwat to request companies to provide data from the past, previously captured by companies in historic versions of the CAW, in a new table which allows underlying data to be restated to a standard set of emissions factors and reporting methodologies. We would welcome the opportunity to work with Ofwat and other water companies to explore available data and to co-develop a suitable carbon reduction target.
- It is unclear to us whether if the operational GHG emissions performance level referenced in Appendix 9 of the methodology is the same for the incentive mechanism as the operational emissions performance commitment target. We believe these should be consistent.
- We are also unclear whether all of the assessment for the incentive mechanism is relating to operational emissions or if some of the tiers are focused on 'embedded' emissions. We believe both should be considered and incentivised, but need to be dealt with separately. For example, it is not appropriate to report emissions relating to delivery of a capital project on an annual basis and compare years against each other. Embedded emissions should be reported at the completion of a scheme against a counterfactual e.g. the base position or a traditional solution.

2. Allocation of costs allowances for emissions reduction

- To make a fair assessment of operational GHG emissions reduction, we believe Ofwat should take into account how far companies have already gone on their net zero journey.
- As set out in our recent Future Ideas Lab paper, it would be unrealistic to expect that the historic emissions reduction trend, or cost-benefit positions, will continue into the future. Keeping emissions as they currently are will become increasingly stretching for companies, more so for companies like United Utilities who have already made good progress. A substantial proportion of water companies' emissions reductions have resulted from decarbonisation of the national electricity grid and investment in renewable self-generation supported by national incentives. In the future, we're expecting carbon reduction costs to increase, and we have already undertaken many of the most commercially attractive options, without a primary carbon driver in most cases. For example, renewable energy tariffs have recently increased in price and are this is projected to continue, and national renewable energy incentives have changed enormously in recent years. In the past, companies have not been focused on GHG emissions reduction as a primary driver and emissions have been reduced where financially viable. Therefore, future base costs would need to include the cost of carbon reduction in addition to historic base. For Bioresources specifically, this would skew the Bioresources market as it would increase the £/TDS in comparison to other Anaerobic Digestion companies during AMP8.
- As an industry, we're expecting substantial growth pressure in emissions from standard enhancement programmes that drive a large increase in resources such as electricity, fuels, chemicals and concrete – the impact of Defra's storm overflows discharge reduction plan will likely also generate a significant increase in such resources. Furthermore, nationally we're forecasting that the sludge produced from Wastewater Network Plus will increase by 15% by 2030 and 40% by 2040 due to phosphorus reduction schemes on the Environment Agency's (EA) Water Industry National Environment Plan (WINEP). Treating sewage and sludge to achieve these more stringent environmental standards will increase GHG emissions. As we currently report emissions from sludge based on sludge produced, we can expect reported emissions from the Carbon Accounting Workbook (CAW) to increase by 15% by 2030 too. We're also expecting that Farming Rules for Water will increase the distance which needs to be travelled with biosolids by 2-2.5x from AMP7 levels. This in turn will increase emissions in sludge disposal transport.
- Within the CAW the current wastewater process emissions methodology is determined by population size and sludge produced, which are outside of company control and generally fail to recognise the annual benefit of interventions. We're forecasting population growth during AMP8 which will in turn cause a linear increase in emissions in the current reporting method. The sector is working to improve the accuracy of this reporting, but substantial monitoring is needed to enable this.
- Ofwat has proposed the methodology for reporting GHG emissions reduction as the 'UK Water Industry Research Ltd (UKWIR) Carbon Accounting Workbook (CAW), with a version of this due in November 2024 prior to the start of AMP8. However, our expectation is that, by this time, the CAW will still rely on inferring GHG emissions from process emissions using a population equivalent / sludge produced value. It is therefore unlikely to be possible to report through this route on any management interventions for process emission reduction, and companies will report increasing emissions as population and sludge values grow.
- We consider that there are aspects of the CAW which make it susceptible to ongoing methodology revisions year on year, leading to significant uncertainty about the targets that management are ultimately tasked with achieving and the measurement of progress against those targets. The CAW is an evolving framework which is updated annually as emission factors evolve and accounting methods improve. In coming years we are expecting some fundamental changes to reporting standards. These include potentially significant changes on how insetting and offsetting are treated and how wastewater process emissions are understood and monitored.
- We propose that keeping a standard version of the CAW throughout AMP8 would be most appropriate for assessing company performance against the PCL. However, this does pose a disadvantage that emissions reporting for the operational emissions performance commitment and Annual Performance Reporting (APR) will deviate as the CAW updates each year of AMP8. This is not a new reporting challenge

for companies to manage, as we already have different reporting boundaries and definitions in our Annual Report for Task force for Climate-related Financial Disclosure (TCFD) to our reporting in our APR

- If Ofwat choose to update the methodology (CAW) throughout AMP8, then the target and baseline will also need to update to enable companies to report real emissions reduction changes rather than just those as a result of a change in methodology. We have a general preference for stability and consistency within an AMP, with only rare exceptions where there is a highly material value requiring revision. This is needed to avoid further complexity for Ofwat and companies to manage, and potential confusion for stakeholders trying to monitor our performance.
- Development of the CAW will also be required to enable reporting by price control. Aspects such as 'sludge transport' and 'sludge treatment' are not currently split between Wastewater Network Plus and Bioresources. There are also some cross price control activities e.g. peatland restoration and woodland creation which would need to be split consistently between price controls across the industry. If it is Ofwat's intention for companies to report performance by price control, work will need to be developed with UKWIR prior to AMP8.

3. Incentive mechanisms available for GHG emissions opportunities

- The draft methodology (Appendix 9) refers to four funding mechanisms for carbon emissions reduction. It is not clear to us, looking across Ofwat's documents and webinars, whether all four of these will be made available to companies. In particular, it was unclear from the webinars whether the net zero enhancement reduction would be made available to all companies.
- It is also unclear to us whether it is expected that companies will need to meet the 'operational emissions target' within base before the other mechanisms are available. We are not able to comment on whether this is reasonable until we understand how stretching the target may be, and the detail of how it will be defined and monitored. We believe that all companies should be able to access all four tiers of funding. As an example, not all net zero enhancements would reduce emissions, they may be focused on improving our monitoring of process emissions to benefit emission reduction in the long term.
- In the draft methodology it appears that Ofwat expects that standard enhancements would reduce GHG emissions, for example water quality improvement projects in the WINEP. Our general expectation is that both operational and embedded emissions will increase when we are responding to more stringent environmental standards. This is because enhancement projects typically involve the construction of new assets that require large amounts of concrete and metal (etc.), and the new asset operation is likely to need more energy, fuels and chemical dosing. Some projects may have the option for a nature based solution (NBS) where the speed and scale of change allows it, however this is substantially restricted by fixed and near term regulatory compliance deadlines and absolute permit requirements. If applicable, then the NBS is likely to help reduce the whole life carbon impact compared to a traditional solution, but not sufficiently that it's an overall negative contributor to emissions. For this reason, we propose that additional allowances should be made available for emissions reduction beyond what would happen in the traditional solution for the quality driver.
- In Appendix 9 it is proposed to benchmark a stretch emissions reduction that companies should be able to deliver from standard enhancement. It is not clear if this is operational emissions only, or embedded compared against a traditional solution. As raised in our clarification questions; clarity is needed about this, including if it is bespoke to companies or standard to the industry, how it will be measured and if it will be a stretch to the operational emissions PCL or as an additional emissions PCD?
- As raised in our clarification, we are unclear what is in scope for the net zero enhancement funding compared to the net zero challenge. For the net zero enhancement funding; we think it is unlikely that net zero would be a sole driver as many projects that would aid the delivery of net zero have wider benefits too, but it is important that carbon is increasingly seen and incentivised as a valid and valuable primary driver.
- It is important that the approach to PR24 recognises the value of projects which would improve understanding of GHG emissions to enable improved management in the future, but without directly creating any immediate or guaranteed reductions. For example, it is a priority to install monitoring to improve measurement and reporting of process emissions. As well as ensuring support for such enabling

projects, it is also important to recognise that this could cause reportable (but not actual) emissions to increase if it led to a change in reporting methodology (in this example from inferred population equivalent / sludge produced, to actual measured emissions at our treatment works.)

4. Opportunities for companies to reduce GHG emissions

- The draft methodology makes reference to offsets being a lower preference to emissions reduction. Whilst we agree with this preference hierarchy, we believe it is essential that companies should be incentivised to manage their net carbon impact in the most efficient and effective ways in order to deliver for customers, stakeholders and the environment. It is also important to recognise the role of collaboration with regulators and other stakeholders who also have critical roles in achieving the optimal pathway to net zero, working alongside companies. Options for companies managing their net carbon impact include;
    - avoiding new GHG emissions as far as possible, including collaborative innovation, planning and assessment of sector priorities to ensure effective optimisation of environmental, climate and social (including affordability) priorities.
    - improving our assets to reduce their GHG emissions, and working with others to reduce their pressures on water company assets and processes, such as protecting raw water sources to avoid energy and chemical use in water treatment, and removing surface water from the sewers to avoid pumping and wastewater treatment.
    - capturing carbon from biomethane production, exporting biogas or electricity from Bioresources
    - investing in negative emissions activities on land where we deliver our core services e.g. peatland restoration and woodland creation to protect water quality and manage surface water flows. This activity could be classed as offsetting but is similar to NBS, as these activities will have multiple benefits for our region and customers.
    - Using offset credits where appropriate and in the interests of customers e.g. where a credit is cheaper than the alternative capex solution. It is important that the use of such credits is governed to ensure confident and credible emissions avoidance using recognised and established principles.
- Companies should be incentivised to undertake emission reduction projects which have a payback beyond AMP8 where benefits are delivered over the longer term. This would enable companies to take into account rapidly changing cost-benefit positions as they develop and improve on some things such as price of energy increases or threats of resilience disruption increases.

5. Reporting definitions

- We have set out our understanding of Ofwat's approach, and would welcome the opportunity to work with Ofwat to help define this. Clarity is needed on reporting for both the incentive mechanism and the performance commitment. We would welcome clarity on which GHG Protocol scopes and categories are included within 'operational emissions' and 'embedded emissions' reporting, and which categories are outside either of these two boundaries. We propose that we should report in order of our ability to influence e.g. scope 1, scope 2, scope 3 capital and infrastructure categories during AMP8, and expanding to other scope 3 categories by 2050.
- When reporting scope 2 emissions, clarity is needed as to how companies report performance which is delivered by them as opposed to grid decarbonisation. We propose that energy efficiency delivered by companies is reported separately to overall energy consumption with a kWh to $kgCO_2e$ factor throughout AMP8. This helps to highlight actions of companies to mitigate their energy consumption. The detail of what is included within this and calculation method would need to be developed with Ofwat and other water companies. This is linked to the type of reporting selected by Ofwat (market or location based), see the last point in this section.
- To ensure consistency and credibility, it is important that the sector's approach to embedded and scope 3 emissions remains aligned to existing best practice definitions, standards and frameworks such as the GHG Protocol, Science Based Target initiative (SBTi) guidance and Publicly Available Specification 2080 (PAS2080). It is also important that approaches are designed in a way to support decision making based

on whole-life GHG emissions and long term sustainability. United Utilities has assessed its scope 3 emissions and approved and published Science Based Targets for their reduction, all aligned to the recommendations of the SBTi. This has enabled us to now disclose annual emissions from all relevant scope 3 categories. Our work shows that there is a need to improve data capture and reporting processes across the supply chain. We also found that these emissions are likely to fluctuate markedly year on year because of the cyclical nature of investment programmes in the water industry. We would welcome the opportunity to explore this further with Ofwat and share the learning we have taken from our recent work.

- 'Embedded' emissions (emissions associated with delivery of a capital project) annually would give an unrepresentative view of a snap shot of a project lifecycle. Embedded emissions should be compared, as part of whole life emissions, to a counterfactual e.g. a notional project.
- We believe that more clarity is also required about what emissions are included in operational emissions – e.g. Bioresources activities delivered by third parties would move from scope 1 to scope 3. In particular, it is important to understand whether there is an intention to capture all regulatory activities or just those undertaken within the regulated business' assets (i.e. excluding 3rd party assets)?
- It is unclear if Ofwat are proposing that emissions should be reported as net or gross, and whether these will use location based or market based reporting for electricity. We would propose net emissions reporting to help align with the national goal for net zero. There are pros and cons of both location and market based reporting which we propose is worked through by the industry with Ofwat to develop a proposal that does not create perverse incentives. For example; the cost of green electricity is likely to increase in the future which would cause companies to have to choose between lower emissions and lower cost.

6. Reporting boundaries

- We expect that the reporting boundary will be for our regulated appointed business. However, more work will be needed to understand how Ofwat intends to manage the impact of Sludge trading, both imports and exports.

7. Link to Data Table Requirements

- The points made in the sections above should be replicated in the reporting in data tables. For example; clear definitions are required for emissions reduction and what this reporting should include. I.e. are these operational emissions, which scopes are included, if these are embedded is this against a counterfactual.
- Data tables expect that emissions will be reducing every year but as referenced above there are a lot of external challenges which mean that emissions are likely to increase e.g. quality programmes delivering tighter environment standards. This needs to be accounted for in data table reporting lines.

In conclusion, we recognise the reporting and methodological challenges associated with this area and we believe that there are significant areas where additional clarity will be required in order to successfully implement Ofwat's proposed approach. We also recognise that these answers should not come from Ofwat alone, but that there is a general requirement for the industry and regulators to work together in order to establish a robust approach. We would welcome the opportunity to work with Ofwat to help define the details of GHG emissions reduction at PR24 as we see it as real benefit to both the industry and customers, if it is done correctly.

Q12.7 Do you agree with our proposal that the performance commitment on serious pollution incidents should only apply to water and wastewater companies?

Response: *Strongly Agree / Agree / Neither agree nor disagree /* ***Disagree*** */ Strongly disagree*

We consider that the performance commitment on serious pollution incidents should be extended to all companies in the sector. All companies have the potential to cause such an incident and therefore, whether they are WoCs or WaSCs, they are required to report such incidents in their EPA. Customers and stakeholders do not care whether the company who caused the pollution has both water and wastewater licences; foremost to their mind is that a serious pollution incident has taken place.

We consider that the metric can be easily extended to water only companies. Serious pollution is reported as an actual number of incidents in the current year's EPA. Unlike total pollution incidents which are normalised by using the denominator of 10,000km of sewer network, no such factor would be required because a simple count of incidents is used. If the common PC only applies to WaSCs then the perverse situation could be created whereby a WoC would not be penalised by Ofwat's ODI regime for a serious pollution incident at a water treatment works, but a WaSC with an identical incident at a water treatment works would be penalised.

Q12.8 Do you agree we should focus the bathing water performance commitment on the outcome that customers have received and should continue to develop an alternative definition to do this?

Response: *Strongly Agree / Agree / Neither agree nor disagree /* ***Disagree*** */ Strongly disagree*

We recognise that bathing water quality and the added value of access to good quality recreational water is a priority. We consider that option 2 in the draft methodology (an approach based on weighting the classifications by Defra) and option 3 as detailed at Ofwat's Outcomes Working Group (OWG) on 1 September 2022 should both achieve this outcome. Whilst we see that further development of option 3 is required, particularly around the approach of including all samples, and look forward to engaging with Ofwat further at the OWG on the development of this PC. We consider that option 3 has benefits similar to option 2 – in that it tracks the progress of all bathing waters, not just those rated "Excellent" by the EA – but it also has the added ability to incorporate real time data from relevant samples across the bathing season. We support the approach which Ofwat proposes in both options 2 and 3, of using a weighted average index to reflect the company performance over the year.

However, we strongly consider that Ofwat should amend their approach of including all samples in the PC. There is an established process for excluding samples used for assessing bathing water compliance, written into law in the Bathing Water Regulations 2013. These regulations cover the designations of bathing waters - which Ofwat proposes to include in this common PC - alongside such things as the process for excluding samples – which Ofwat proposes to deviate from in this common PC. We consider therefore that the measurement of this PC should follow that of UK law and apply the notion of "abnormal situations" (and therefore exclude associated sample results), even where there is no known source of the pollution. In most cases, this would be diffuse pollutions – and by definition beyond the control of the EA (and certainly beyond the control of the water company). There may need to be some element of post-APR reporting reconciliation, whereby Ofwat can query a company's rationale for excluding samples from their PC. We consider that such a process can be accommodated by the current APR query process and draft and final in-period determination processes.

We also consider that given the target of this common performance commitment is for sites where a large number of people are expected to enter waters to paddle or swim, we do not find it reasonable that Ofwat propose to exclude inland bathing waters on the basis that most are lakes which are not impacted by water companies (appx 6 p.54). Such an exclusion appears to imply that Windermere, the location for the annual Great North Swim with 10,000 swimmers, and with four designated bathing waters is excluded from the measure. All bathing waters which company operations have an impact on should be included in the common PC. We consider that the average weighted indices proposed for options 2 and 3 are simple, straightforward and easy to understand. It will show improvements or deterioration across all bathing waters (not just those rated “excellent”) and we consider that it is an easy to interpret figure for customers to understand. Option 2 is an established method of reporting which uses the same information already available in the public domain on the Defra website.

We do not support the use of option 1 (the percentage of bathing waters classified as “excellent” by the EA) as, consistent with our response to Ofwat’s November 2021 consultation on Performance Commitments, we consider that all categories should be included in the bathing water quality assessment. Option 1 doesn’t measure any improvements or deteriorations in lower categories.

We have some reservation over the disconnect between how option 3 would report bathing water performance versus how the results are published on the Defra website, potentially causing confusion of classification by bathing water users.

Should option 3 be taken forward, we would also advocate that the samples used in the annual performance assessment must be taken at regular intervals during the bathing water season. If all samples were taken in a concentrated time period, e.g. one month, then it might unnecessarily skew performance and be unrepresentative of the outcomes for bathing water users. Also, we advocate that this PC should be measured only during the relevant period (i.e. the statutory bathing season of 15 May to 30 September each year) and not Ofwat’s proposed measurement timing of “calendar year”.

We support Ofwat’s proposals that different water companies will get bespoke target levels. This will reflect the different levels of bathing water status and therefore levels of investment which companies have had and made historically. External factors can also differ around the company regions, such as agricultural contributions, coastal population density both of which cause variation in runoff and litter. Partnership engagement also varies by region and, given bathing water quality is a multifaceted challenge, this can make a difference in the baseline and ability for improvements to be made within management control.

Q12.9 Do you agree with our proposal for the river water quality performance commitment to measure the reduction of phosphorus entering rivers?

Response: *Strongly Agree / Agree /* ***Neither agree nor disagree*** */ Disagree / Strongly disagree*

We agree with the intent of this performance commitment and we also support the proposal for company specific targets (PCLs) on this common PC as it should enable company investment history and resulting baselines variations to be taken into account. We consider that further detail is required on the measurement unit. Whilst this is currently marked as “TBC” the draft methodology does state that it is “Kg per population” but without any detail as to what this population refers to. We consider that there could be at least three different measurements of population or population equivalent: population relating to the WwTW, relating to the catchment, or population of the UUW region, and how modelled catchment P removal could be incorporated into this calculation. The PC would benefit from further definition in a number of areas including what assets would be included. For example, there are assets that we already own with phosphorus permits but then there’s also the assets that we’ll build to achieve new standards in AMP8. The PC needs to clearly define whether future AMP8 assets would also be measured by this PC.

There is a risk that this PC will incentivise companies to change their operations in a way which results in the production of more sludge requiring treatment and disposal in Bioresources, resulting in an increase in cost and impact on customers. As part of the design of this PC this needs to be taken into consideration along with the increase in sludge production due to the implications of the Environment Act. Our view is that this PC will drive benefits to water quality without significantly increasing cost by optimising existing processes for additional phosphorus removal for the benefit of river water quality.

Phosphorus in biosolids is (currently) the limiting nutrient for agricultural recycling. The Environment Act targets to reduce phosphorus in wastewater will lead directly to a significant increase in phosphorus in sludge. We forecast that concentrations will double as a result of this target. By removing more phosphorous in the WwN+ price control, customers will pay outperformance ODIs but will also then pay again as P removal will create more tonnes of dry solids in the Bioresources control. Given how this price control is regulated, this means that customers will pay more for the higher quantities of sludge produced. More sludge production would create significant costs for disposal which are presumably not recognised in the current cost assessment models which Ofwat plans to use. Growth in phosphorous in sludge would need to be incorporated into future bioresources econometric modelling. Increased sludge production (and therefore disposal) would also significantly increase carbon emissions. The new £/tds for sludge which will be calculated and used at PR24 will be based on historic parameters of sludge and therefore would be unlikely to take into consideration the sludge created with these higher phosphorous concentrations drive primarily by the Environment Act. Such cost considerations must be taken into account in both assessment of companies' performance commitment levels of ambition and cost assessment. If this incentive encourages the faster or deeper transfer of phosphorus into sludge and the acceleration of the saturation of biosolids to agriculture (as seems to be the trajectory implied by the draft methodology) then the incentive rate will need to incorporate the significantly higher cost to manage bioresources, possibly including for the cost of incineration.

Considerable issues are already foreseen, to some extent, with the changing legal landscape relating to safe environmental sludge disposal routes (e.g. restricted land bank and incineration options curtailed by carbon emissions considerations). Should more incineration facilities be required to deal with this increase in sludge (and an ever-restricted land bank for disposal routes), the ten year lead time to build such facilities means that we need more certainty to commit to such expenditure and long term plans. We consider that the legal and regulatory landscape in this area does not currently provide us with such certainty meaning that it is risky to act.

We are leading a National Landbank Study in collaboration with all WaSCs and the EA as part of the WINEP sludge driver risks and issues. The results of this modelling will be available in a few months. The extent of the challenge will be revealed and we would be very keen to engage with Ofwat and the EA to share that information and how it may need to build into the costs for bioresources or into the incentive rate for this proposed PC.

We welcome Ofwat's engagement with the sector on this matter through the task and finish group and look forward to further engagement with this group in the further development of this measure which we consider is required. We would also recommend that the group is expanded to include specific bioresources representation, as phosphorous is a matter which spans both WwN+ and BR price controls.

13. Appendix 13 – Data and modelling

Q13.1 Do you agree with our proposed approach to mechanisms at PR24?

Response: *Strongly Agree* / ***Agree*** / *Neither agree nor disagree* / *Disagree* / *Strongly disagree*

In general, we agree with Ofwat's proposals, noting the following specific comments:

- It is unlikely that any residual Green Recovery schemes can just become PCDs as there are different cost sharing rates between the GR determinations and PR24 proposals and so it will likely just be simpler to keep these schemes separate from general cost sharing and PCD reconciliations.
- We agree that the DSRA in its current form would not be needed if the majority of developer services revenues are removed from the single till but we believe that Ofwat should continue to reconcile its assumptions over network reinforcement revenues if this remains within the total revenue allowance. Also, as noted in our response to 7.2, there may also be a role, depending on Ofwat's final approach to nutrient neutrality, to use the DSRA to manage the risk of over/under recovery of nutrient neutrality costs.
- We agree that the WINEP adjustment mechanism is unlikely to be required for AMP8 given there is not the same level of uncertainty around the need. However, depending on how the biodiversity and greenhouse gas emission performance commitments are measured and baselined, we think that Ofwat might need to develop a reconciliation mechanism to account for differences between ex-ante assumptions of traditional/NBS and what companies actually deliver.
- If Ofwat intends to continue with the innovation competition in AMP8 then we think that it should continue to have an associated reconciliation adjustment.

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