

Representations: Outcomes

Document Reference: J002

This document sets out our representations to Ofwat on aspects of their PR19 July draft determinations relating to outcomes.

United Utilities Water Limited



Contents

1	Executive summary.....	3
1.1	Implications of slow-track determinations.....	3
1.2	The risk-reward balance.....	3
1.3	Summary of our response.....	4
2	Common measures.....	7
2.1	Internal sewer flooding (Ofwat reference PR19UU_G02-WWN).....	7
2.2	Interruptions to supply (Ofwat reference PR19UU_B03-WN).....	8
2.3	Water mains repairs (Ofwat reference PR19UU_B02-WN).....	8
2.4	Compliance Risk Index (Ofwat reference PR19UU_A01-CF).....	9
2.5	Per capita consumption (Ofwat reference PR19UU_B05-WN).....	10
2.6	Unplanned Outage (Ofwat reference PR19UU_B04-CF).....	11
2.7	Sewer collapses (Ofwat reference PR19UU_F01-WWN).....	12
2.8	C-MeX.....	13
2.9	D-MeX.....	15
3	Incentive rates.....	15
3.1	General changes.....	15
3.2	Supply interruptions and PCC.....	15
3.3	Sewer collapses.....	16
3.4	Summary of proposed changes to incentive rates.....	17
3.5	Enhanced ODI structure for pollution incidents.....	18
4	Bespoke measures.....	18
4.1	Water quality customer contacts (Ofwat reference PR19UU_A02-WN).....	18
4.2	Environmental programme (Ofwat reference PR19UU_C04-WR and C05-WWN).....	19
4.3	Voids (Reference PR19UU_E10-HH).....	19
4.4	Non-households gaps and vacancies.....	20
5	Appendix 2 –Table commentary.....	21
6	UU Table OC1.....	22
A.	Approach to the completion of table OC1.....	22
B.	Parameters consistent with fast track draft determination.....	22
C.	Parameters consistent with slow track draft determinations.....	23
7	UU Table OC2.1, 2.2, 2.3.....	28
8	UU Table OC3.....	29

J002 – Outcomes

9	UU Table OC4.....	30
B	Common performance commitments.....	30
B1	Common measures where we are not proposing changes	30
B2	Commentary to measures with proposed changes	31
C	Bespoke performance commitments.....	33
C1	Measures included with the draft determination	33
C2	Additional measures recorded in Table OC2.3.	39

1 Executive summary

1.1 Implications of slow-track determinations

This document sets out our response to issues relating to outcomes in the Draft Determinations for slow-track companies. These determinations have significant implications for United Utilities. Therefore this response focuses on the effects on us and how these could be mitigated, although many of the issues raised have more general implications.

The Draft Determination document “*Delivering outcomes for customers policy appendix*” has effectively set us a new Draft Determination in relation to outcomes, with many changes to performance commitments and incentive rates. While, having opted out of early certainty, we were expecting changes, we consider that the extent of changes goes beyond what is reasonable given the agreements we reached in relation to fast-track status.

We have been disadvantaged relative to slow-track companies, in that:

- We have received later and less complete information.
- It is unclear whether Ofwat intends to apply all the potential changes.
- Changes arising from the slow-track determination include issues where we have not had the opportunity to make representations and collect additional evidence because they have not previously been signalled at the time of the IAP assessment.

We recognise that, as these are Draft Determinations for slow-track companies, these determinations do not address the issues which we have raised in response to our IAP and our fast-track Draft Determination. The representations below only relate to issues raised by the slow-track Determinations and are in addition to those which we made in May in response to the Draft Determination for United Utilities. Therefore this document must be read in conjunction with our previous submission “*D002 - Outcomes*”, which was uploaded to the Ofwat SharePoint site on 9th May.

1.2 The risk-reward balance

Ofwat’s Draft Determination set out a return on regulatory equity (RoRE) range of -2.3% (P10) to +1.0% (P90) for ODIs. We considered that this was not an appropriate balance of risk. The changes arising from the slow-track determinations would take the potential downside over Ofwat’s 3% threshold for considering a company to be exposed to a disproportionate level of downside risk. The range, in terms of the sum of individual P10/P90 ranges, is -3.1% to +0.8%. Our package-level estimate of the range is -2.6% to +0.5%. Ofwat’s final methodology stated an indicative range for companies’ ODI outperformance and underperformance payments of $\pm 1\%$ to $\pm 3\%$ of RoRE, and we are not within this range. The expected outcome of a net financial penalty, taken together with very tight constraints on costs and a low cost of capital, produces an overall package which we feel does not give the right balance between risk and return.

In our business plan, we set an overall package with stretching but realistic service performance targets, within costs constrained to ensure an affordable package. Ofwat’s approach involves taking optimistic forecasts from a few companies, using different companies for different

J002 – Outcomes

measures, often where companies have built additional costs into their plans. This produces a service package which we believe will not generally be deliverable by the industry within the cost levels which Ofwat expects companies to achieve.

We are seeking some changes to performance commitments and incentive rates and structure. We consider that this will deliver a reasonable balance between underperformance and outperformance and is in accordance with the framework for setting outcomes and incentives. Our proposed ODI package would produce a P10/P90 range of -2.2% to +1.1%, which we believe would be a more reasonable balance and bring the range within that set out in Ofwat’s methodology. The key changes which we consider are essential to remove the disproportionate downside risk are:

- Applying to United Utilities the same internal sewer flooding collar that has been applied to all the five slow-track companies which do not have an enhanced ODI. Storms in the AMP6 period, including most recently in July 2019, have emphasised the difficulties in reducing sewer flooding in an area of high rainfall.
- Applying a glide-path to sewer flooding, using the same approach as for interruptions to water supply.
- Removing the increase in the water supply interruptions and per capita consumption ODI underperformance rates. As the outcomes appendix notes, this is a change in approach, with increases in incentive rates which are company-specific rather than mechanistic. They incorporate specific judgements relating to our customer research and valuation, rather than being industry-wide decisions. Therefore we consider that these changes are not appropriate to apply to a fast-track company.
- Accepting the level of mains repairs proposed in our Draft Determination response, which is better than the level defined by Ofwat as “good”.
- Revisions to the unplanned outage and sewer collapses performance commitment levels to reflect our latest estimates of current performance and the uncertainty about making comparisons for these new measures.
- A change to the incentive rates for voids, where we consider that there is an inappropriate risk-reward balance.

1.3 Summary of our response

The table below shows the issues covered and outlines our response.

Section	Issue	Our response
2. Common measures		
2.1	Internal sewer flooding	The standard collar on underperformance which has been applied to other companies should also be applied to UU. We think that the glidepath for internal flooding should be modified, as it has been for interruptions.
2.2	Water supply interruptions	We consider that the scale of immediate reduction required means that most of the industry will not be able to meet the 2020-21 target. We have proposed an alternative glidepath.

Section	Issue	Our response
2.3	Water mains repairs	The level which we proposed in our response to our fast-track draft determination is one of the lowest in the industry, and better than Ofwat’s threshold for good performance. Therefore we consider that our proposal should be acceptable.
2.4	Compliance Risk Index	We welcome the change to the deadband. However, we consider that the deadband is still insufficient because scores are volatile from year to year. The majority of companies would face penalties, despite the industry’s good performance on water quality.
2.5	Per Capita Consumption	We do not consider the proposed targets are achievable and Ofwat should revert to its initial proposals for PCC reductions.
2.6	Unplanned outage	UU’s target needs to be reset to reflect our revised estimates. We propose that our target should be based on our fast-track Draft Determination response. The target should show a profiled reduction to 2024-25.
2.7	Sewer collapses	UU’s target needs to be reset to reflect our revised estimates. Given the recent movement towards a common definition, we believe that companies’ estimates of collapses are not yet fully comparable. Therefore it is not appropriate to set targets for large reductions based on company comparisons. We have proposed a glidepath based on the Draft Determination profile.
2.8	C-MeX	We believe that changes are needed to the design to improve the accuracy of the results. We do not believe that the Net Promoter Score approach is meaningful to customers.
2.9	D-MeX	We support the D-Mex proposals and have welcomed the opportunity to involved in the working groups to date. We would be happy to participate in any future working groups.
3. Changes to incentive rates		
3.1	General changes	We welcome the recognition that where underperformance rates are changed, the corresponding outperformance rate should also change (and vice versa).
3.2	Supply interruptions and PCC	We do not consider the changes to PCC and water supply interruption rates to be justified. These increases are company-specific rather than mechanistic. We do not consider applying such an approach is compatible with fast-track status, nor is it justified by our customer research.

Section	Issue	Our response
3.3	Sewer collapses	Our proposed incentive rate is at median level, and very similar to rates proposed by a number of other companies. The potential financial impact is very high, taking into account the uncertainty associated with a move to common measurement. We have proposed a lower incentive rate.
3.4	Enhanced ODI – pollution	We accept the Ofwat approach and have set out our understanding of the new structure.
4. Bespoke measures		
4.1	Water quality customer contacts	In view of the difficulties in reducing customer contacts from upland sources, and the additional complication associated with the potential scheme to address discolouration in the Vyrnwy aqueduct, we propose that the target set in the UU fast-track Draft Determination be retained.
4.2	Environmental programme	It was agreed, as part of the actions related to being awarded fast-track status, that our WINEP performance commitments would be non-financial. However, we accept that a financial incentive to ensure timely delivery would be reasonable, given its application to other companies.
4.3	Voids	We consider that the proposed underperformance incentive rate would mean that the financial impact would be disproportionate, relative to other ODIs. We have proposed a reduced rate.

This response relates only to issues arising from the slow-track determinations. The following representations relating to bespoke measures still apply but are not repeated here:

- A proposed correction to the natural capital cap.
- A proposed correction to the biosolids incentive rate.
- Reintroduction of a financial incentive for systems thinking.
- Reintroduction of a financial incentive for keeping reservoirs resilient (associated with a cost adjustment claim).

In addition, in our business plan we proposed performance commitments relating to direct procurement for our Manchester and Pennine resilience scheme. These performance commitments have the potential to impact significantly on its potential for success. We are planning for delivery in line with the milestones and principles set out in these PCs. Therefore we request that Ofwat engage with us ahead of the final determination to provide their assessment of these performance commitments, so that we can prepare any representations on Ofwat’s assessment, for consideration for the final determinations.

2 Common measures

2.1 Internal sewer flooding (Ofwat reference PR19UU_G02-WWN)

This performance commitment is a material contributor to downside financial risk. When combined with the rest of the outcomes delivery incentive package, we consider the financial exposure that we face resulting from this performance commitment's underperformance would be disproportionate. We have, therefore, proposed changes to the underperformance collar and to the glidepath for targets.

Underperformance collar

A standard underperformance collar has been applied to all the five slow-track companies that do not have an enhanced incentive rate structure for their internal flooding ODI. This has been set at 3.35 incidents per 10,000 population for each year of AMP7. We consider that this should also be applied to our internal flooding ODI.

This collar is 2 to 2.5 times above the PC target level, so will provide a significant level of compensation to customers if our performance is below target. In addition, the collar is slightly higher than our Draft Determination collar in 2020-21, which is the year a collar is most likely to apply because we will only have had a short time in which to implement improvement. Therefore, the proposed collar would not put too tight a limit on underperformance payments.

Collar – Incidents per 10,000 properties	2020-21	2021-22	2022-23	2023-24	2024-25
UU Draft determination	3.0	3.5	4.0	4.5	5.0
Our proposal	3.35	3.35	3.35	3.35	3.35

Glidepath for targets

Trends in flooding in recent years, and 2018-19 performance on sewer flooding, suggest that the proposed change in performance by 2020-21 cannot realistically be achieved by much of the industry. Work by companies to reduce flooding is being offset to some extent by more frequent periods of high rainfall. Actions to achieve improvements often take some time before they affect the number of incidents. As we have set out in our business plan and response to the draft determination, there are particular difficulties for us in achieving the proposed targets. However, we think that the targets will be problematic more widely.

2018-19 was generally a relatively benign year in terms of periods of heavy rainfall. Average performance was around 2.4 incidents per 10,000 properties, and a 30% reduction would be required to meet the 2020-21 target. For at least some companies, 2019-20 performance is likely to be worse because of severe storms. In the seven days from 27th July we estimate that there were 650 flooding incidents (internal and external), which is 9% of the previous year's total in one week.

We propose that the target be reduced at an even rate from 2018-19 actual performance, retaining the Draft Determination target for 2024-25. This gives the profile shown below.

PC levels - Incidents per 10,000 properties	2020-21	2021-22	2022-23	2023-24	2024-25
Draft determinations	1.68	1.63	1.58	1.44	1.34
Our proposal	2.04	1.86	1.68	1.51	1.34

2.2 Interruptions to supply (Ofwat reference PR19UU_B03-WN)

We welcome the change to the glidepath for achieving reductions in interruptions to supply. However, we still consider that the scale of immediate reduction required means that most of the industry will not be able to meet the 2020-21 target. Only two companies (small water-only companies with relatively compact networks) achieved less than 6 minutes interruptions per customer in 2018-19.

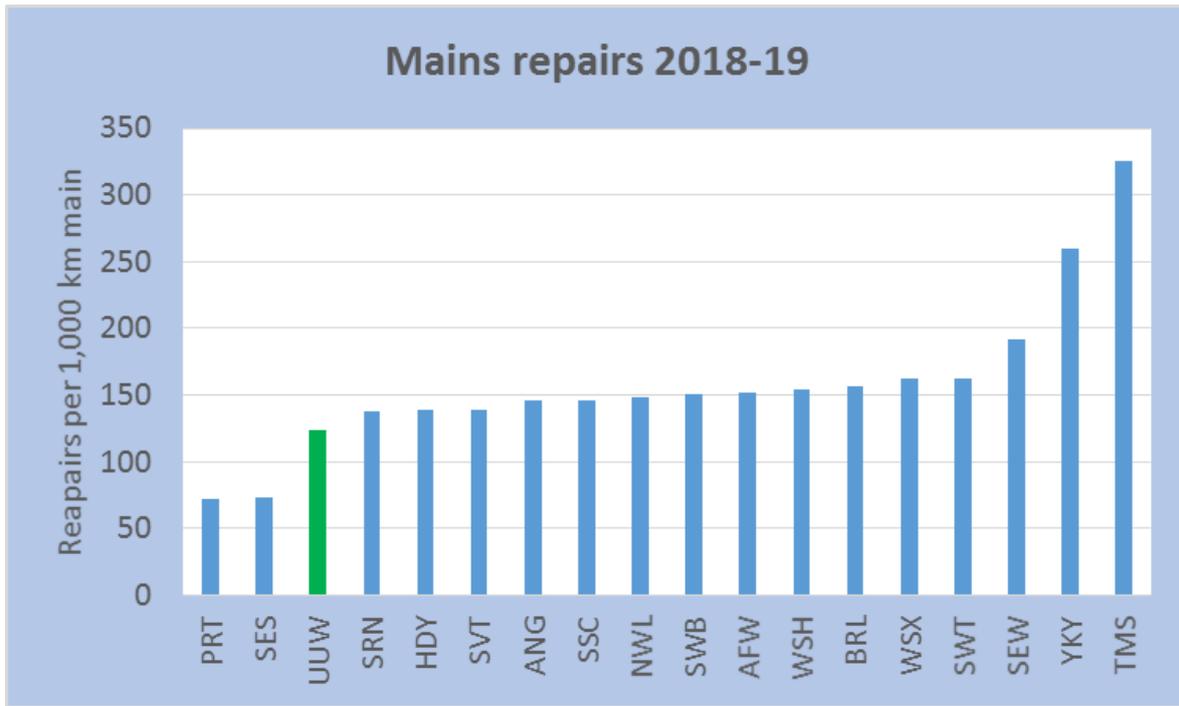
We recognise that the 2018-19 performance was significantly affected by bad weather. Therefore we propose using 2016-17 as a starting point (average performance around 11 minutes per customer) and allowing for a steady improvement to 2024-25, retaining the Draft Determination target for 2024-25. This gives the profile shown below.

Minutes per customer	2020-21	2021-22	2022-23	2023-24	2024-25
Slow-track draft determinations	5:24	4:48	4:12	3:36	3:00
Our proposal	7:00	6:00	5:00	4:00	3:00

2.3 Water mains repairs (Ofwat reference PR19UU_B02-WN)

Our revised target, as set out in our response to our April draft determination, is for performance better than the level that Ofwat has identified as good. Table 3.2 of the “Delivering outcomes for customers” policy appendix defines a level of 120 repairs per 1,000 km of main as being good. The appendix states that Ofwat only intervenes when performance is defined as worse than the good level.

Our representations in May proposed a rate of 119 repairs per 1,000 km of water mains (below the 120 threshold). Therefore, we consider that our target should now be acceptable. In 2018-19, only two small water-only companies had repairs below this level. This is shown in the graph below. Our proposed target for AMP7 is below the 2018-19 level.



The alternative approach, based on the average of 3 years of best historical performance from 2011-2018, would not be achievable, in view of our targets to achieve leakage reductions. Given the required 20% leakage reduction, our proposed target is ambitious and stretching. We continue to believe that:

- Reducing leakage has an impact on the number of mains repairs.
- A higher rate of mains replacement would not be an economic approach, even after taking into account the social costs of mains repairs referred to by Ofwat.

However, since the approach set out in the outcomes appendix shows our proposed level of mains repairs to be acceptable, we are not submitting further evidence at this stage.

Repairs per 1,000 km of water main	2020-21	2021-22	2022-23	2023-24	2024-25
UU Draft determination	110	110	110	110	110
Our proposal	119	119	119	119	119

2.4 Compliance Risk Index (Ofwat reference PR19UU_A01-CF)

We welcome the change to the deadband. However, we consider that the deadband is still insufficient because:

- Scores are volatile from year to year – the average change in company score between 2017 and 2018 was 2. We consider that this reflects normal variation rather than real differences in water quality performance. The current deadband is likely to mean that companies which are generally above upper quartile will incur penalties at some point in AMP7.

J002 – Outcomes

- The industry performs well on water quality compliance, but the proposed deadband for the last three years of AMP7 would see the majority of companies facing penalties.
- The potential for underperformance penalties might be offset by improving performance. However, it is highly likely that there will be changes to drinking water standards during the period (specifically associated with the recasting of the Drinking Water Directive in 2022 or earlier), which will make achieving targets more problematic.

We proposed a deadband set at the 2017 industry average of 3.5 in our response to the UU Draft Determination and still consider that this would be appropriate (2018 performance is slightly worse than this, at 3.9). The DWI commented in response to the Ofwat consultation on “Delivering Water 2020: Consulting on our methodology for the 2019 price review” that:

“For CRI, as with MZC, we would propose a penalty only ODI. As every compliance failure (or event) represents a failure of the company to meet their statutory obligations it is not appropriate to offer rewards. As such, in terms of a target, companies should aim for CRI (and ERI) scores of zero and thus aspire to continuous improvement and results of at least at a level that is equal to or below the national average”.

We consider that an expectation of achieving at least the industry average should mean that underperformance penalties should apply to below-average performance. The deadband has been set at a level where a majority of companies would have incurred penalties in each of the last three years (on average, 70% of companies).

CRI deadband	2020-21	2021-22	2022-23	2023-24	2024-25
Slow-track draft determinations	2	2	1.5	1.5	1.5
Our proposal	3.5	3.5	3.5	3.5	3.5

2.5 Per capita consumption (Ofwat reference PR19UU_B05-WN)

We do not consider that target reductions of 6% or more, as incorporated in the draft determinations, are achievable without a large-scale programme of metering. Evidence from past experience indicates that such a reduction cannot be achieved within a five-year period. The outcomes appendix states

“water consumption in England and Wales is high relative to other European countries, many of which achieve water consumption levels below 120 litres per person per day”.

J002 – Outcomes

However, EU data¹ shows that UK consumption is generally below or similar to that in other countries with similar income levels, including France, Germany and the Netherlands. Therefore, we consider that Ofwat should revert to its initial proposals for PCC reductions.

The higher target for reducing PCC is not derived from applying a standard approach across companies but is based on reconsidering UU’s own supply-demand balance position. We do not consider this to be appropriate for a fast-track company where a company-specific judgement has already been made.

We assess the potential impact of this measure to be financially material, as defined in the outcomes appendix. We therefore propose that a cap and collar be applied, at the standard industry level, i.e. +/- 10% of the 2020-21 level.

PCC (litres per person per day)	2020-21	2021-22	2022-23	2023-24	2024-25
Target					
Slow-track draft determinations	139.9	138.5	137.1	134.8	132.4
Our proposal (as UU draft determination)	140.3	139	137.3	135.6	133.9
Cap and collar					
Collar	154.3	152.9	151.0	149.2	147.3
Cap	126.3	125.1	123.6	122.0	120.5

2.6 Unplanned Outage (Ofwat reference PR19UU_B04-CF)

UU’s Draft Determination included performance commitment levels in line with our business plan. In our response to our Draft Determination, we set out how improvement in compliance with the methodology for this measure had resulted in a significant reduction in the historic and forecast unplanned outage values.

The spreadsheet issued by Ofwat following the slow-track Draft Determination showed a revised target, based on the median of company 2024-25 forecasts. There are a number of issues with this proposed target:

- Where a target has been imposed, companies have generally been given a profiled reduction to 2024-25, whereas for UU it is an immediate reduction. We do not think this is realistic, even with our new lower numbers.
- There needs to be more time to establish whether companies’ data are comparable. Differences may be attributable to measurement rather than real differences in performance.

¹ Eurostat Water Statistics, August 2019

J002 – Outcomes

- Different levels of outage may be appropriate. The more spare capacity a company has, and the more inter-linked the network, the higher the economic level of outage. This should be considered further during AMP7.

We propose that our target should be based on our Draft Determination response. The target should show a profiled reduction to 2024-25.

In view of the uncertainties associated with this new measure, we propose that a collar be introduced. In line with the Ofwat methodology, we propose that this be set at twice the 2020-21 target.

Outage %	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
UU Business plan / Draft determination	11.02	11.02	10.91	10.80	10.69	10.58
Our DD representations	3.87	3.87	3.83	3.79	3.75	3.72
Slow-track draft determination	11.02	2,34	2.34	2.34	2.34	2.34
Our proposal	3.87	3.87	3.83	3.79	3.75	3.72
Proposed collar	7.74	7.74	7.74	7.74	7.74	7.74

2.7 Sewer collapses (Ofwat reference PR19UU_F01-WWN)

Target for collapses

The sewer collapse target needs to be adjusted to reflect our movement towards the common definition for the measure. This has resulted in a substantial increase in our estimated level of collapses. We set out our proposed revised target in our response to the UU Draft Determination. We gave full details of the changes, which led to a higher reported figure in our supplementary IAP response on sewer collapses (I020 Update to F01-WWN Sewer collapses) submitted to Ofwat on 15th May 2019.

The base years of 2017-18 and 2018-19 have been created based on a retrospective view of our existing data. Before the start of AMP7, we will be adapting our existing processes in order to better comply with the methodology but will not be able to have a significant period of shadow reporting before the start of the AMP. Our proposed revised target, set out in our response to the UU Draft Determination, included an 8.7% reduction in collapses from 2019-20 to 2024-25, in line with the percentage reduction in the UU Draft Determination.

We recognise that our revised estimate is worse than the Ofwat assessed “good” level. Applying the slow-track determination methodology would lead to a target with a 28% reduction in sewer collapses. However, we consider that achieving this target would require a significantly increased rate of sewer replacement or rehabilitation. This would not be possible within our proposed level of expenditure.

J002 – Outcomes

Given the recent movement towards a common definition, we believe that companies' estimates of collapses are not yet fully comparable. Therefore, it is not appropriate to set targets for large reductions based on company comparisons.

We also propose that an underperformance collar be set because of the increased uncertainty about future numbers of collapses. We have set this at the Ofwat standard level of 1.5x the 2020-21 level.

Ofwat targets and our proposals are set out in the table below.

Collapses per 1,000 km of sewer	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
UU Business plan / Draft determination	4.17	4.14	4.06	3.98	3.89	3.81
Our DD representations	16.12	15.84	15.56	15.28	15.00	14.73
Slow-track draft determination	4.17	4.14	4.06	3.98	3.89	3.81
Slow-track DD adjusted using Ofwat methodology	16.12	15.22	14.07	12.95	11.86	10.80
Our proposal	16.12	15.84	15.56	15.28	15.00	14.73
Underperformance collar		22.83	22.83	22.83	22.83	22.83

2.8 C-MeX

We welcome the clarity that Ofwat's publication of revised C-MeX guidance as part of the draft determinations outcomes appendix provides. We continue to endorse the objectives and overarching structure of the C-MeX proposals, and recognise the crucial role this new incentive will have on focussing industry efforts on boosting service for customers over the coming years.

However, we continue to have concerns with the latest proposed design and operation of the C-MeX survey. Following work with Frontier Economics, as presented in J002b "Assessing the Statistical Validity of C-MeX" we have concluded that the current design and sample sizes proposed for C-MeX surveys are likely to drive unintended consequences, to the detriment of customers. However, Frontier have identified a range of relatively small changes to methodology, survey structure and incentive calculation that can materially address these challenges.

Ofwat has described C-MeX as a key component of the AMP7 regulatory regime, and it is crucial that it commands the confidence of customers, companies and wider stakeholders. The work completed by Frontier Economics shows that the current C-MeX design is likely to result in a high degree of incorrect relative company ranking year on year, directly driving inappropriate rewards and penalties. Such errors will inevitably undermine the integrity of a high-profile incentive.

Frontier Economics have identified a number of relatively small interventions that can help overcome these issues, and result in a C-MeX incentive that is more likely to attract the confidence of companies, customers and wider stakeholders:

- **Double C-MeX sample sizes:** Ofwat should at least double sample sizes to get the confidence intervals that are referenced in the C-MeX methodology paper. The approach to defining separate sub-pots for telephone and digital contacts is further reducing statistical confidence levels and should be reviewed.
- **Discontinue the use of Net Promoter Score (NPS):** The use of NPS is actively reducing statistical significance of results, and is not in practice adding stretch to C-MeX as it is highly correlated to satisfaction scores. There are clear indications that customers do not understand how NPS ratings differ from general satisfaction ratings. Removing NPS from C-MeX calculations will help boost the statistical significance of final company scores substantially.
- **Consider how the sample size is divided between the customer service and experience components:** The customer service survey has a larger impact on the uncertainty of results than the customer experience survey, as customer responses are spread across a wider range. Allocating a larger percentage of available survey size to the customer service survey will therefore help reduce the overall level of noise.
- **Remove 'cliff edges' from incentive calculations:** The way in which Ofwat currently propose to apply financial and reputational incentives is not supported by the uncertainty ranges observed for annual company scores. A more gradual financial incentive, with fewer cliff edges, would be preferable. Similarly, ranking individual companies 1-17 in end of year performance reports is not supported by the data. Instead, grouping companies into performance bands (good performers, average performers, poor performers, etc.) would be more appropriate given the uncertainty of data.

The issues Frontier has identified, if left unaddressed, risk undermining confidence in C-MeX scores and incentives. Without confidence that scores will reflect underlying performance the incentive risks failing to drive management efforts to improve service, and customers will lose out.

However, all of these issues can be directly and efficiently addressed, without requiring major changes to the established C-MeX methodology. We welcome Ofwat's statement that they are keeping the use of NPS under review for the shadow year (2019/20), and believe evidence is now sufficiently clear that it should be dropped from future surveys. Based on the evidence and analysis of Frontier Economics, we also strongly believe that the total sample sizes, the balance of surveys between experience and satisfaction surveys, and the detailed design of reward/penalty calculations should be reconsidered. For example Frontier estimate that both omitting NPS and redistributing survey resources from customer experience to customer satisfaction could increase C-MeX precision by around 30%, which is the improvement expected from increasing the sample size by nearly 100%.

2.9 D-MeX

We generally support the D-Mex proposals and have welcomed the opportunity to be involved in the working groups to date. We support the proposal to move to an average of averages based on work types. We would be happy to participate in any future working groups regarding the levels of services to include, or to support any customer groups to understand the measures they consider to be more important.

3 Incentive rates

3.1 General changes

We welcome the recognition that where underperformance rates are changed, the corresponding outperformance rate should also change (and vice versa). We do not consider that marginal utility declines at the rate suggested by using a multiple of 1.2 between outperformance and underperformance, particularly as further improvement often means different customers benefit, rather than the same customer receiving additional benefit. However, for the purposes of adjusting our draft determination, we accept use of this multiple. We also accept the proposed changes to the enhanced ODI rates and structure for pollution incidents.

3.2 Supply interruptions and PCC

The slow-track determinations set out further changes in UU incentive rates for interruptions to supply and per capita consumption. Instead of bringing our incentive rates to the bottom or top of a range, these are now a judgement which is described as not being mechanistic and not applied deterministically. We do not consider it appropriate to apply such judgements and to reconsider our customer research when we have been given fast-track status.

The proposed revised rate for PCC means that the implied customer value is similar to that for leakage (91p per cubic metre for PCC and 95p for leakage). This is not in line with our customer research, nor that of other companies, which all put a significantly higher value on leakage reduction than on water efficiency measures. This was reflected in companies' business plan proposals for PCC and leakage ODI rates, where leakage ODI rates were, on average, about eight times higher than PCC ODI rates. We do not consider that the proposed rate can be justified either from our research or from comparisons with other companies.

For supply interruptions, the proposed value is close to the top of the range from our research and well above that from our most in-depth research (immersive research). Our triangulation approach was endorsed by YourVoice, our Customer Challenge Group. It was also supported by ICF (who developed a framework for triangulation for CCWater), who reviewed our analysis for ourselves and for YourVoice. We do not consider that the value of £1,300 for one customer being interrupted for one day, implied by the proposed ODI rate, is a plausible valuation.

J002 – Outcomes

We propose, therefore, that the underperformance rates be reset to those in our Draft Determination, with outperformance rates being set by using Ofwat’s standard approach of dividing the outperformance rate by 1.2.

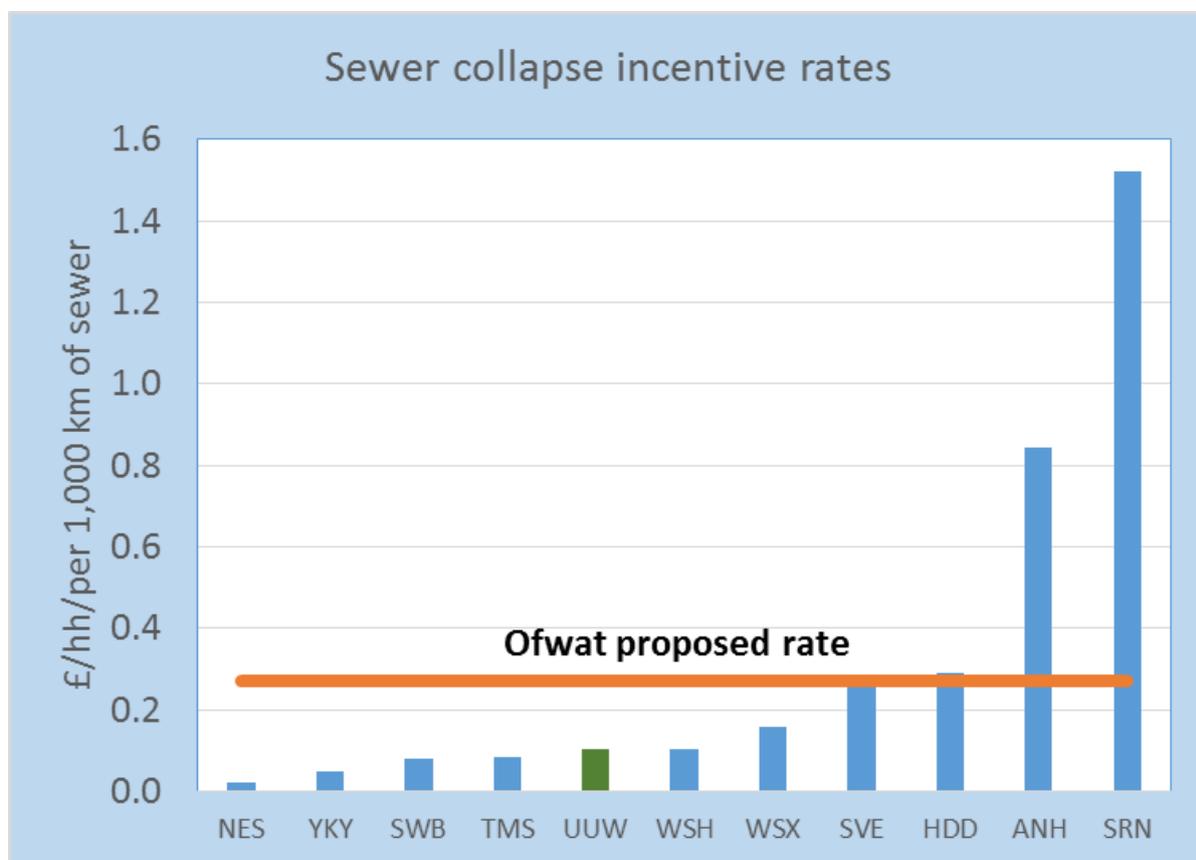
We recognise that the incentive rate for water quality contacts has not been through the same review process previously. We only introduced the combined PC for taste, smell and appearance after the IAP process. Therefore we accept the proposed change.

3.3 Sewer collapses

We consider that the sewer collapse incentive rate for UU should be reviewed because:

- The impact of moving towards a common definition for the measure has led to us revising our data, with a substantial increase in our estimate. With this being a recent change, there is some uncertainty about the future collapse rate.
- It would not be appropriate, where there is significant uncertainty in the measurement, for the potential underperformance payments (P10) to be substantially increased from our initial estimates. The new estimate, using the UU Draft Determination incentive rates, increased the P10 AMP7 total from -£6m to -£25m.

Our proposed incentive rate is at median level, and very similar to rates proposed by a number of other companies. It would result in P10 underperformance penalties of -£9m, i.e. slightly more than the Draft Determination level of -£6m. We propose that the incentive rate be reset to our original proposal.



3.4 Summary of proposed changes to incentive rates

The table below summarises Ofwat’s proposals for ODI rates, and the incentive rates that we consider should be applied.

Performance commitment	Change to incentive rates	Unit	Incentive rate (£m)		
			UU Draft Determination	Slow-track	Our proposal
Interruptions to supply	Outperformance	Minutes per customer	0.215	1.179	0.592
	Underperformance		-0.710	-1.415	-0.710
Per capita consumption	Underperformance	PCC (litres per person per day)	-0.310	-0.500	-0.310
	Outperformance		0.193	0.416	0.258
Leakage	Outperformance	MI/d	0.129	0.146	0.146
Internal flooding	Outperformance	Incidents per 10,000 connections	2.060	6.896	6.896
External flooding	Outperformance	Per incident	0.0007	0.00537	0.00537
Pollution incidents	Underperformance – standard rate	Per 10,000 km of sewer	-1.353	-0.912	-0.912
	Underperformance – enhanced rate		-2.706	-1.340	-1.340
	Outperformance – standard rate		0.760	0.760	0.760
	Outperformance – enhanced rate		1.520	1.340	1.340
Sewer collapses	Underperformance	Per 10,000 km of sewer	-0.82	-0.82	-0.308
Water quality contacts	Outperformance	Contacts per 10,000 connections	-7.165	2.076	2.076
	Underperformance		-7.165	-2.491	-2.491

3.5 Enhanced ODI structure for pollution incidents

We accept the Ofwat approach and have set out below the proposed new structure.

Pollution incidents per 10,000 km of sewer	2020-21	2021-22	2022-23	2023-24	2024-25
Standard underperformance penalty collar					
UU Draft determination	30.8	30.8	30.8	30.8	30.8
Now proposed	39.7	39.7	39.7	39.7	39.7
Standard outperformance payment cap					
UU Draft determination	17.0	16.5	16.0	15.5	15.0
Now proposed	15.05	14.57	14.12	13.75	11.97

4 Bespoke measures

4.1 Water quality customer contacts (Ofwat reference PR19UU_A02-WN)

The outcomes appendix indicates that the slow-track determinations could lead to a change in the target and incentive rates for our water quality customer contacts measure. The Draft Determination had already set a stretching target for this measure. Achieving improvement on this measure is difficult because of specific issues relating to surface water sources.

If our performance is compared with those companies, like ourselves, with predominantly soft water, our performance over a number of years on taste and smell contacts places us among the best performers. One of our challenges is the high volume of earthy/musty contacts received. This is attributable to our soft, upland source waters, where there is a high proportion of naturally occurring organics and widespread algae challenges. We compare well with companies that have similar sources. Further details are set out in the supplementary document submitted with our business plan (S3001 – performance commitments technical document).

Contacts regarding appearance were added into our performance commitment, as a result of actions following the IAP. The DWI, in its 2018 annual report, notes that surface water sources is most likely to be affected by such contacts:

“Unsurprisingly, these [contacts about discoloured water] tend to occur more commonly in areas of the country fed by upland surface waters”.

The alkalinity of water within the North West is very low and among the most corrosive to iron mains within the UK. We have successfully and significantly improved our asset base and reduced discolouration contacts. It is the low alkalinity of our water that is now the most significant cause of discolouration contacts. Our scope to artificially increase the alkalinity is limited partly by technical complexity, but mainly by customer rejection. During 2017, our introduction of harder water within an area of West Cumbria resulted in a widespread

J002 – Outcomes

customer rejection, a major customer campaign that remains very active to this day and a major DWI Category 4 incident.

In relation to discoloured water, there is the further issue that a new treatment process is being implemented to reduce discolouration from Oswestry water treatment works. If the required reduction in discolouration within the Vyrnwy aqueduct is not achieved through this approach, we will be required to complete cleaning/lining of the aqueduct. This is subject to a separate ODI. If the cleaning / relining is needed to reduce discolouration, then this will not have an impact on performance on this measure

In view of the difficulties in reducing customer contacts from upland sources, and the additional complication associated with the potential scheme to address discolouration in the Vyrnwy aqueduct, we propose that the targets set in the UU Draft Determination be retained.

Contacts per 10,000 customers	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
UU Draft Determination / our current proposal	18.5	17.6	16.7	15.9	15.1	14.3
Slow-track draft determination	18.5	17.2	16.0	14.7	13.5	12.2

4.2 Environmental programme (Ofwat reference PR19UU_C04-WR and C05-WWN)

The outcomes appendix indicates that the two ODIs relating to delivery of the environmental programme could have a financial incentive attached. It was agreed at the IAP stage to remove the financial incentive from our measures for delivery of the environmental programme. However, we recognise that it could be seen as anomalous if we did not have a financial incentive on us where other companies do. Therefore we do not object to the addition of a financial incentive. This is on the basis that, as set out in Ofwat’s outcomes appendix, the scope of our performance commitments will not change from that set out in our draft determination.

We propose to have separate incentives for water resources and wastewater network+, modifying the two existing PCs:

- PR19UU_C04-WR Improving the water environment
- PR19UU_C05-WWN Improving river water quality

The PC level would be defined as number of schemes delivered in each year, rather than number of days early or late. The definition of schemes included would be unchanged. We have used the Ofwat formula set out in the outcomes appendix to calculate the incentive rate. The commentary to Table OC1 gives further detail on the proposed changes to these PCs.

4.3 Voids (Reference PR19UU_E10-HH)

The outcomes appendix states that a new performance commitment for percentage of void residential properties may be introduced. We consider that the proposed penalty rate is too high, giving a potentially disproportionate impact from this ODI. For a relatively narrow P10 /

J002 – Outcomes

P90 range of only +/-1% per year from the target we face a P10/P90 financial impact of -£58m to +£29m. This seems disproportionate to the impact of other ODIs, and too heavily biased towards underperformance payments. We consider that:

- Customers should share the risks of underperforming, taking into account that even if we do not hit the target they will still be getting benefit of reductions in voids towards the target.
- The rate should take into account bad debt risk, recognising that this will be higher for properties which are occupied, but whose occupiers actively seek to avoid being identified for billing purposes.

Therefore we propose that the underperformance rate be set to match the outperformance rate. This would allow for risk-sharing and for some of the voids now billed becoming bad debt.

Summary of proposed changes to incentive rates

Performance commitment	Change to incentive rates	Unit	Incentive rate (£m)	
			Slow-track	Our proposal
Void properties	Outperformance	£m per 1% void properties	5.99	5.99
	Underperformance		-11.52	-5.99

4.4 Non-households gaps and vacancies

We were one of the few companies to include financial incentives relating to non-household gap sites and vacancies. No issues were raised with these ODIs as part of the IAP process. However, there have been recent discussions involving wholesalers, retailers and other stakeholders on the introduction of a national scheme. We consider that a national approach would contribute to incentives working effectively, and to the market operating efficiently. Therefore, on the basis of the approach developed in discussions to date, we would be willing to modify our two ODIs to align with a national scheme.

5 Appendix 2 –Table commentary

Ofwat requested that we complete the Outcomes Draft Determination Representation Table and return it alongside our July DD representations on 30th August. In completing this template, we referred to the 'United Utilities Table Guidance' tab in the document, which provides more detailed guidance on the spreadsheet and the various tabs within it. Consequently, we have completed all tabs except "UU Table OC3".

As we were awarded fast track status and therefore received an early DD in April, our pro forma takes account of any implications that the July DDs will have on our performance commitments and ODIs, in so far as we are able to discern this. We have also incorporated relevant points from our previous representation on the early DD when completing the pro forma.

The commentary below explains how we have completed this process for each of the tables and also explains any significant items.

6 UU Table OC1

A. Approach to the completion of table OC1

Table OC1 displays both the P10 and P90 performance levels and associated financial profiles, for 45 of our proposed AMP7 performance commitments. As per the Ofwat guidance, the C-MeX and D-MeX metrics are excluded from OC1.

These performance commitments fall into two categories:

1. PC and ODI parameters disclosed in the April 2019 draft determination for fast track companies that have remained unchanged as a result of Ofwat decisions for slow track and significant scrutiny companies, published in July 2019. These measures are set out in Section B below.
2. PC and ODI parameters that have subsequently been amended as a result of Ofwat's decisions for slow track and significant scrutiny companies, published in July 2019. These measures are set out in Section C below, which also sets out the basis for the position used to populate the information within table OC1.

In line with the table guidance, this table does not include the impact of any PC or ODI parameter changes that we proposed in our May 2019 representation (as described in documents D002 and D002b), or in the subsequent representations on the implications of Ofwat decisions for slow-track and significant scrutiny companies that are set out within this document.

B. Parameters consistent with fast track draft determination

Within table OC1 there are 31 measures that are unchanged from the April 2019 draft determination. Details of these positions were outlined in the document D002a.

	Measure	Unique ID
1	Helping customers look after water in their home	PR19UU_A04-WN
2	Number of properties with lead risk reduced	PR19UU_A03-WN
3	Reducing discolouration from the Vyrnwy treated water aqueduct	PR19UU_A05-WN
4	Risk of severe restrictions in a drought	PR19UU_B06-CF
5	Reducing areas of low water pressure	PR19UU_B07-WN
6	Water service resilience	PR19UU_B08-WN
7	Manchester and Pennine resilience	PR19UU_B09-DP
8	Keeping reservoirs resilient	PR19UU_B10-WR
9	Thirlmere transfer into West Cumbria (AMP7)	PR19UU_B11-WN
10	Abstraction incentive mechanism	PR19UU_C03-WR
11	Protecting the environment from the impact of growth and new development	PR19UU_C06-WWN
12	Enhancing natural capital value for customers	PR19UU_C08-CF
13	Recycling biosolids	PR19UU_C09-BR

	Measure	Unique ID
14	Better air quality	PR19UU_C10-BR
15	Priority services for customers in vulnerable circumstances	PR19UU_D03-HH
16	Street works performance	PR19UU_D04-CF
17	Priority Services- BSI accreditation	PR19UU_D05-HH
18	Number of customers lifted out of water poverty	PR19UU_E01-HH
19	Household occupancy verification	PR19UU_E02-HH
20	Non-household vacancy incentive scheme	PR19UU_E03-CF
21	Gap sites (Wholesale)	PR19UU_E04-CF
22	Gap sites (Retail)	PR19UU_E05-HH
23	Systems thinking capability	PR19UU_E06-CF
24	Successful delivery of direct procurement of Manchester and Pennine resilience	PR19UU_E07-DP
25	Strategic regional solution development (Severn Thames transfer)	PR19UU_E08-WR
26	Customers say that we offer value for money	PR19UU_E09-HH
27	Sewer blockages	PR19UU_F02-WWN
28	Risk of sewer flooding in a storm	PR19UU_G01-WWN
29	Raising customer awareness to reduce the risk of flooding	PR19UU_G04-WWN
30	Hydraulic internal flood risk resilience	PR19UU_G05-WWN
31	Hydraulic external flood risk resilience	PR19UU_G06-WWN

C. Parameters consistent with slow track draft determinations

Within table OC1 there are 14 measures that have PC and ODI parameters that have been amended as a result of Ofwat decisions for slow track and significant scrutiny companies.

	Measure	Unique ID	Table OC1 position
1	Water quality compliance (CRI)	PR19UU_A01-CF	Incorporates potential change to the deadband profile
2	Reducing water quality contacts due to taste, smell and appearance	PR19UU_A02-WN	Incorporates potential changes to the performance commitment profile, standard incentive rates and standard cap and collar
3	Leakage	PR19UU_B01-WN	Incorporates potential change to the standard outperformance incentive rate
4	Mains repairs	PR19UU_B02-WN	Incorporates potential change to the standard outperformance incentive rate

	Measure	Unique ID	Table OC1 position
5	Water supply interruptions	PR19UU_B03-WN	Incorporates potential changes to the performance commitment profile and standard incentive rate
6	Unplanned outage	PR19UU_B04-CF	Incorporates potential change to the performance commitment profile
7	Per capita consumption	PR19UU_B05-WN	Incorporates potential change to the standard incentive rates
8	Pollution incidents	PR19UU_C01-WWN	Incorporates potential changes to the underperformance incentive rates (both standard and enhanced), the enhanced outperformance incentive rate and enhanced thresholds, cap and collar
9	Treatment works compliance	PR19UU_C02-CF	Incorporates potential changes to the number of decimal places utilised in reporting
10	Improving the water environment	PR19UU_C04-WR	Incorporates potential changes to standard underperformance incentive rate and re-baseline of P10 performance level. Definition changed to number of schemes delivered in each year.
11	Improving river water quality	PR19UU_C05-WWN	Incorporates potential changes to standard underperformance incentive rate and re-baseline of P10 performance level. Definition changed to number of schemes delivered in each year.
12	Sewer collapses	PR19UU_F01-WWN	Incorporates revision to methodology
13	Internal sewer flooding	PR19UU_G02-WWN	Incorporates potential change to the standard outperformance incentive rate
14	External flooding Incidents	PR19UU_G03-WWN	Incorporates potential changes to standard outperformance incentive rate

The resulting changes to the outcomes performance commitment appendix for the water environment and river water quality schemes are set out below. As set out in Ofwat's outcomes appendix, the scope of our performance commitments will be the same as that set out in our draft determination. We have calculated the incentive rates using the formula set out in the outcomes appendix.

PR19UU_C04-WR: Improving the water environment

<p>Detailed definition of performance measure</p>	<p>The cumulative number of schemes completed each year. Prior to the start of the 2020-25 period, the company will agree its programme of environmental improvement schemes with the Environment Agency, and these schemes will be published in the Environment Agency’s Water Industry National Environment Programme (WINEP), along with a planned schedule. The scope of this PC will be limited to schemes under the FBG (fisheries, biodiversity and groundwater) and WR (water resources) functions on the WINEP with the below drivers:</p> <p>DrWPA_INV (drinking water protected area investigations) DrWPA_ND (drinking water protected area no deterioration) EE_IMP (Eels schemes) HD_IMP (Habitats Directive schemes) HD_INV (Habitats Directive schemes) INNS_INV (investigation invasive non native species) INNS_ND (investigation invasive non native species) NERC_INV1 (investigations related to NERC Act) SSSI_IMP (land improvement schemes) WFD_IMP_WRHMWBWFD_INV_FISH WFD_INV_WRFlow WFD_INV_WRHMWB WFD_ND_WRHMWB WFD_NDINV_WRFlow WFDGW_NDINV_GWR</p> <p>There are a number of schemes which fall into the above categories but are not included within this performance commitment. The Specific exclusions section below provides details of these schemes.</p>
<p>Additional detail on measurement units</p>	<p>Delete sentence:</p> <p>A positive value for this PC indicates that the company has delivered its schemes early on average, whilst a negative result indicates that the company has delivered its schemes late on average.</p>

Measurement unit and decimal places	The cumulative number of schemes completed each year reported to zero decimal places.
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Performance commitment levels

	Unit	Company forecast	Committed performance level				
		2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Performance commitment level	Number		0	28	32	32	69

Incentive rates

Incentive type	Incentive rate (£m per unit)
Underperformance rate - standard	-0.013057

PR19UU_C05-WWN: Improving river water quality

Detailed definition of performance measure	This PC measures the cumulative delivery of the company’s Water Framework Directive river water quality enhancement schemes within the Water Industry National Environment Programme (WINEP). The Water Framework Directive schemes covered by this measure will be those that have an Environment Agency primary or secondary water quality improvement driver, as denoted by codes WFD_IMPg, WFD_IMPm and NERC_IMP1.
Additional detail on measurement units	Delete sentence: A positive value for this PC indicates that the company has delivered its schemes early on average, whilst a negative result indicates that the company has delivered its schemes late on average.
Measurement unit and decimal places	The cumulative number of schemes completed each year reported to zero decimal places.

Performance commitment levels

		Company forecast	Committed performance level				
	Unit	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Performance commitment level	Number		225	484	589	721	838

Incentive rates

Incentive type	Incentive rate (£m per unit)
Underperformance rate - standard	-0.027738

7 UU Table OC2.1, 2.2, 2.3

We have populated Table OC2.1 to include PC/ODI parameter changes that we proposed in both the representations we made in response to the April 2019 UU Draft Determination and the representations we are now making in response to the potential implications for UU of the slow-track Draft Determinations.

The rationale and evidence to support our proposals on the performance commitments that are potentially affected by the slow-track Draft Determinations are described in Sections 2 to 4 of this document.

The rationale and evidence to support our proposals on the bespoke performance commitments that are unaffected by these Draft Determinations are not repeated here. The justification for these proposals, which relate to natural capital, biosolids, keeping reservoirs resilient, and systems thinking, are included within document “D002 Representations: Outcomes”, which was uploaded to the Ofwat SharePoint site on 9th May.

Table OC2.3 - PC/ODI parameters for additional performance commitments proposed as part of draft determination representations

In the outcomes appendix within the slow track Draft Determinations, reference was made to a measure for void properties that was not within our original business plan and was not within our fast track Draft Determination.

We have provided data on this measure within Table OC2.3, to provide the relevant information, if Ofwat decides to implement these changes, within our Final Determination. The fact that we have provided this information does not constitute a representation that this change should be made.

The potential new performance commitments for “Voids” (PR19UU_E10-HH) would replace performance commitment “Household occupancy verification” (PR19UU_E02-HH). We have set the “Remove PC” flag for the existing measure to “Yes” within table OC2.1.

Issues in transposing App1 incentives into OC2

There are a few minor transposition issues with OC2, as these tables do not have all of the same functionality as App1. Our approach in these cases is set out below.

Recycling biosolids (PR19UU_C09-BR):

App1 allows for multiple standard incentive rates, whereas only one can be put into OC2. For recycling biosolids in App1 we have an outperformance rate of £1.5m for three consecutive years at 100% compliance, and a second £1.5m incentive rate for five consecutive years at 100% compliance.

Our approach to populating OC2 has been to insert £1.5m into the standard incentive rate cell in OC2, and keep the P10 and P90 positions consistent with the May representations. This single incentive rate applies to both the three year and the five year outperformance rules.

J002 – Outcomes

Protecting the environment from growth (PR19UU_C06-WWN):

App1 allows you to insert an 'AMP7 max' financial position for P10s and P90s, but this is not available in OC2. We used this cell to incorporate any additional financial impact of elements of the programme that will need to be reconciled after the AMP has finished (our 'run-out' year).

For the protecting the environment measure, there was an additional -£0.50362m added into the 'max' position to accommodate the reconciliation of the post AMP7 run-out year in the P10 profile.

Our approach to populating OC2 has been to add this total into the year 5 P10 underperformance cell, to get the financial position to balance. There is an additional financial penalty added into the year 5 financial position that would typically be reconciled after AMP7 has concluded.

Keeping reservoirs resilient (PR19UU_B10-WR)

Our reservoir resilience measure has a standard incentive rate to account for early and late delivery, which would be reconciled 'in-period'. It also has a separate standard (larger) incentive rate that would be reconciled at the end of the AMP for elements of the programme that we have not delivered.

App1 allows you to choose 'both' as an option for ODI timing, where you wish to apply both in-period and end of AMP ODI calculations to a single metric. This option is not available in OC2.

Our approach to completing OC2 has been to insert 'end of AMP' as the ODI timing for this measure, although in practice we intend to retain the 'both' ODI timing function and our second standard incentive rates, for this measure. The second standard incentive rate for end of AMP reconciliation should therefore, still apply (-£0.006831m under and £0.006831m out), although there is nowhere to input this value within table OC2.

As with the protecting the environment from growth measure, we have added the 'run out' year financial totals onto year 5.

8 UU Table OC3

Not applicable for U UW therefore not completed.

9 UU Table OC4

We have used this table to provide shadow reporting data for the 2018-19 reporting year, wherever this was practically feasible.

We have ensured that our shadow reporting data fully aligns with the performance commitment definitions and measurement units set out in either the UUW Outcomes performance commitment appendix published as part of our fast track draft determinations, or relevant information from the slow track draft determinations.

We have included data for all our bespoke measures, including the measures that we are proposing to add for the final determination or to remove from the final determination. We have also provided information for the common measures, where we are proposing a change to the PC/ODI parameters set out in the draft determinations.

B Common performance commitments

This section of the commentary to Table OC4 lists the performance commitments where we are not proposing a change to the PC/ODI parameters set out in the draft determinations. It also provides a commentary to the shadow data for 2018/19, where we are proposing changes.

B1 Common measures where we are not proposing changes

We are not proposing any changes to the following common measures and have therefore left the relevant cells blank in Table OC4:

Water quality compliance (CRI)	PR19UU_A01-CF
Water supply interruptions	PR19UU_B03-WN
Leakage (Megalitres per day, three-year average, absolute level)	PR19UU_B01-WN
Leakage (Megalitres per day, three-year average, % reduction from 2019-20 baseline)	PR19UU_B01-WN
Per capita consumption (Litres per person per day, three-year average, absolute level)	PR19UU_B05-WN
Per capita consumption (Litres per person per day, three-year average, % reduction from 2019-20 baseline)	PR19UU_B05-WN
Mains repairs	PR19UU_B02-WN
Unplanned outage	PR19UU_B04-CF
Risk of severe restrictions in a drought	PR19UU_B06-CF
Priority services for customers in vulnerable circumstances	PR19UU_D03-HH
Internal sewer flooding	PR19UU_G02-WWN
Pollution incidents	PR19UU_C01-WWN

J002 – Outcomes

Risk of sewer flooding in a storm	PR19UU_G01-WWN
Sewer collapses	PR19UU_F01-WWN
Treatment works compliance	PR19UU_C02-CF

B2 Commentary to measures with proposed changes

The shadow performance for each of the common measures where we are proposing changes is set out below.

B2.1 Water quality compliance (CRI) (PR19UU_A01-CF)

The 2018/19 shadow figure is 2.26. This value is slightly lower (better) than the original App1 figure of 2.92 and reflects the year on year variability in performance against this measure.

B2.2 Water supply interruptions (PR19UU_B03-WN)

The 2018/19 shadow figure is 9 minutes 18 seconds. This value is lower (better) than the original App1 figure of 12 minutes and 11 seconds. This reflects the benefits of the work that we have undertaken in this area over recent years and particularly the effective use of our alternative supply vehicles. This 2018/19 performance level also reflects that there were relatively few major bursts in the year. This measure is highly influenced by major one-off incidents, which could increase the level of supply interruptions in future years.

B2.3 Per capita consumption (Litres per person per day, three-year average, absolute level) (PR19UU_B05-WN)

The 2018/19 shadow figure for the three-year rolling average is 141.3 litres per person per day, with the annual value for 2018 being 144 litres per person per day. Although this value was left blank in the original App1 table, it is higher than we had assumed within our business plan.

This increase is mainly due to the long and dry summer of 2018 which, despite the extensive and targeted customer communications campaign that we implemented, led to a significant increase in the demand of water compared to our expected typical summer demands.

The average amount of potable water entering our system is about 1,770 MI/day, although this can typically vary between 1,750 and 1,800 MI/day. The peak demand during the summer of 2018 was 2,225 MI/day, which is c.455 MI/day (0.5 billion litres of water/day) higher than the longer term average. This peak was within a period of 19 days from mid-June into the first part of July where demand never dropped below 2,000 MI/day, averaging 2,110 MI/day. The sustained nature of the high demand and the scale of the step change from the typical demand levels is not something we had seen at this scale before.

B2.4 Per capita consumption (Litres per person per day, three-year average, % reduction from 2019-20 baseline) (PR19UU_B05-WN)

We are assuming that annual per capita consumption in 2019/20 will reduce from the 2018/19 level to the level that we achieved in 2015/16. This would mean that the baseline three-year average figure in 2019/20 would be the same as the three year average value in 2018/19.

J002 – Outcomes

Therefore the value of the difference between the two figures is zero, which is the value input to table OC4.

B2.5 Mains repairs (PR19UU_B02-WN)

The 2018/19 shadow value is 123.8 mains repair per 1,000 km of main. This value is higher than the value forecast within App1 (121.8 repairs). This increase was in part due to the impact of the dry weather in 2018, together with the impact of the additional work that we needed to undertake to control leakage levels.

B2.6 Unplanned outage (PR19UU_B04-CF)

The 2018/19 shadow value is 3.70%. This value is different from the value reported in App1. This is because we have reassessed our methodology for the measure, with the current value being the same as the value reported in our response to IAP action B04-CF Unplanned outage (document reference I018), which was added to the SharePoint portal on 15th May 2019.

B2.7 Priority services for customers in vulnerable circumstances (PR19UU_D03-HH)

Our 2018/19 figures show that we have 2.5% of our household property base on the Priority Services register. This is 0.1% above our Table App1 forecast of 2.4%. We have been able to sign up additional customers to our register more quickly than anticipated. This has been achieved by continued data sharing with Electricity North West and the effective promotion of the scheme by our customer service agents.

In 2018/19 we attempted to contact 100% of customers to establish that they are still receiving the right support. We therefore input 2.5% / 100% into APR table 3S and have input the same values into table OC4.

This performance commitment also requires us to report on the % of customers on the register that we have actually contacted in the year. Our 2018/19 forecast in Table App1 was based on a previous definition of contact. Based on the new guidance, issued following the Draft Determination for slow track and significant scrutiny companies in July 2018, we are unable to report performance for 2018/19 as we do not hold historic records aligned with the new methodology. We are developing processes to enable us to report this from 2020.

B2.8 Internal sewer flooding (PR19UU_G02-WWN)

The 2018/19 shadow value is 958 incidents per 10,000 sewer connections. This value is lower than the value of 1,341 that we assumed in App1. This difference to some degree reflects the work we have undertaken in this area, but is more reflective of the extent to which this measure varies with the weather. 2018 was a particularly dry year.

The weather in 2019 is more typical, with 685 incidents occurring in the first four months of the financial year, and over three times more hydraulic incidents occurring in this period than the whole of 2018/19.

B2.10 Sewer collapses (PR19UU_F01-WWN)

The 2018/19 shadow value is 16.16 collapses per 1,000km of sewer. This value is different to the 4.17 collapses that we originally included within App1. The change is the result of a change

J002 – Outcomes

in and clarifications to the methodology as a result of the converged measure workshops. The basis of this value and the rationale for the change from the previous value are set out within the document “update to our response to IAP query F01-WWN Sewer collapses” (reference I020), which was uploaded to the Ofwat SharePoint site on 15th May 2019.

C Bespoke performance commitments

This section of the document provides information on the shadow reporting data for our bespoke performance commitments, including the measures that we are proposing to add or remove from the final determination.

C1 Measures included with the draft determination

C1.1. Reducing water quality contacts due to taste, smell and appearance (PR19UU_A02-WN)

The 2018/19 shadow value is 19.7 contacts per 1,000 km of sewer. This value is slightly higher than the forecast value of 19.5 contacts that we had included within App1.

C1.2. Number of properties with lead risk reduced (PR19UU_A03-WN)

This value was left blank in App1 and has been left blank within Table OC4. The performance commitment measures performance against a proposed new incentive mechanism, which is not currently in place.

C1.3. Helping customers look after water in their home (PR19UU_A04-WN)

This value was left blank in App1 and has been left blank within Table OC4. This performance commitment monitors the increased awareness of customers to their impact on both water quality and water efficiency within their home. It is quantified in terms of the % increase from the 2018 baseline value of 19.5%. The 2018/19 shadow figure (based upon three surveys undertaken in the financial year) was also 19.5%, which is the same as the baseline value.

C1.4. Reducing discolouration from the Vyrnwy treated water aqueduct (PR19UU_A05-WN)

This value was left blank in App1 and has been left blank within Table OC4. The performance commitment will only come into effect if this scheme is required to be implemented during AMP7.

C1.5. Reducing areas of low water pressure (PR19UU_B07-WN)

The 2018/19 shadow value is 0.783 customers receiving low pressure/poor supply per 10,000 connected properties. This value is slightly lower than the value of 0.873 customers that we originally forecast within App1, which reflects the year on year variability affecting the measure.

C1.6. Water service resilience (PR19UU_B08-WN)

This performance commitment measures reduction in risk of customer water supply service days lost per year relative to a baseline position that will be set in 2019-20. We have input a value of zero into OC4, which reflects the fact that we are not expecting to deliver any schemes which would reduce risk levels during 2019/20.

J002 – Outcomes

C1.7. Manchester and Pennine resilience (PR19UU_B09-DP)

This value was left blank in App1 and has been left blank within Table OC4. The performance commitment reviews the development of this scheme during AMP7.

C1.8. Keeping reservoirs resilient (PR19UU_B11-WN)

This value was left blank in App1 and has been left blank within Table OC4. The performance commitment reviews the delivery of the risk reduction achieved through our proposed AMP7 programme of reservoir improvements.

C1.9. Thirlmere transfer into West Cumbria (AMP7) (PR19UU_B10-WR)

This performance commitment is a continuation on from an equivalent AMP6 performance commitment. The 2018/19 shadow value is 56.68, which is slightly lower than the value of 58.86 that we originally forecast within App1. Both values reflect the significant acceleration of the scheme that has occurred within AMP6, with the slight reduction in value reflecting that the superstructure of the WTW was not fully completed in 2018/19. This element of the programme was originally planned to be delivered in 2020/21. It will now be delivered in 2019/20 and as such will not affect the forecast value for the start of AMP7.

C1.10. Abstraction incentive mechanism (PR19UU_C03-WR)

This value was left blank in App1 and has been left blank within Table OC4. Although we measure AIM in AMP6, it is measured against a larger number of rivers and against a different baseline abstraction level for each river.

C1.11. Improving the water environment (PR19UU_C04-WR)

This value was left blank in App1 and has been left blank within Table OC4. Although we have a programme to improve the environment in AMP6, it is measured in a different way and is applied to a different programme of work.

C1.12. Improving river water quality (PR19UU_C05-WWN)

This value was left blank in App1 and has been left blank within Table OC4. Although we have a programme to improve rivers in AMP6, it is measured in a different way and is applied to a different programme of work.

C1.13. Protecting the environment from the impact of growth and new development (PR19UU_C06-WWN)

The 2018/19 shadow figure is 307,920. This is slightly higher than the original forecast value of 304,238 that was input into App1. This increase is due to delivering schemes at Cuddington WwTW and Oakmere WwTW's in 2018/19, rather than in 2019/20 as been anticipated. The acceleration of these two projects within the AMP6 programme does not affect the AMP7 programme of work or the proposals for this performance commitment.

J002 – Outcomes

C1.14. Enhancing natural capital value for customers (PR19UU_C08-CF)

This value was left blank in App1 and has been left blank within Table OC4. This is a new performance commitment, which measures the natural capital value delivered over and above regulatory requirements and will only come in to effect in the AMP7 period.

C1.15. Recycling biosolids (PR19UU_C09-BR)

The 2018/19 shadow figure is 97.39. This is lower (worse) than the original App1 figure of 99.33. We faced a number of operational issue during 2018/19, which required us to incur additional costs to maintain 100% compliance with our existing measure, but did result in a dip in performance against the AMP7 measure.

C1.16. Better air quality (PR19UU_C10-BR)

This performance commitment measures the tonnes of NOx emitted per GWh electricity generated from bioresources. The 2018/19 shadow figure was 1.43 tonnes. This is lower (better) than the original App1 figure of 1.49. The improved performance is due to the acceleration of two key initiatives at our Shell Green and Davyhulme sites. These initiatives were always planned to be implemented in AMP6 and as such the acceleration does not affect the end of AMP6 position or AMP7 targets.

C1.17. Street works performance (PR19UU_D04-CF)

This non-financial performance commitment measures non-compliance against the Safety at Street works and Roads Works Code of Practice and the specification for the reinstatement of openings in highways. The 2018/19 shadow value is 8.89% non-compliance. This is lower (better) than the original forecast App1 figure of 11%. 2018/19 was one of our best ever years, with our forecast for 2019/20 being 10.65%, based on actual data from April to the end of July.

C1.18. Priority Services- BSI accreditation (PR19UU_D05-HH)

This value was left blank in App1 and has been left blank within Table OC4. We are working towards achieving the accreditation in 2020/21.

C1.19. Number of customers lifted out of water poverty (PR19UU_E01-HH)

Our 2018/19 shadow figure is 53,977 customers, which is 7,130 above our App1 forecast of 46,847. This improved performance is due to two main factors:

- Achieving a fast track determination in January 2019 has given us certainty in our performance commitments, enabling us to make progress in working towards our targets. We have been able to offer assistance to more customers in water poverty, especially via our Town Action Planning initiative and our dedicated affordability teams.
- In our September 2018 Business Plan submission we committed to having a validation process to check at least every 3 years if a customer's income level had changed since we lifted them out of water poverty via one of our schemes. These checks have not yet begun. During 2019/20 we will commence verification of customers' circumstances to confirm if they are still eligible for the schemes and tariffs we have applied. This will result in us determining if a customer is no longer in water poverty and therefore should

J002 – Outcomes

not be included in the reporting of this performance commitment. As a result we expect to see some downward pressures on the number of customers supported.

This has resulted in us being ahead of forecast in 2018/19. However, we do not believe this will affect the total number of customers we are able to help by 2025. We believe our target of 66,500 customers being lifted out of water poverty by 2024-25 is a challenging one, which represents a 45% increase on support levels in 2017-2018.

C1.20. Household occupancy verification (PR19UU_E02-HH)

This performance commitment measures the percentage of the connected household property base that has been verified as either occupied or unoccupied/void at year-end. The 2018/19 shadow value of 95.1% is in line with our original App1 forecast. We continue to use third party data, such as Credit Reference Agency and property visits, to validate property status, as well as ensuring that our moving home process is robust.

C1.21. Non-household vacancy incentive scheme (PR19UU_E03-CF)

This value was left blank in App1 and has been left blank within Table OC4. This measure relates to a new incentive scheme, which will only come in to effect from April 2020.

C1.22. Gap sites (Wholesale) (PR19UU_E04-CF)

This value was left blank in App1 and has been left blank within Table OC4. This measure relates to a new incentive scheme, which will only come in to effect in April 2020.

C1.23. Gap sites (Retail) (PR19UU_E05-HH)

Our 2018/19 figure of 1,155 gap sites identified is 475 less than our Table App1 forecast of 1,630. In our September 2018 Business Plan submission we stated that we had started to develop techniques to identify gap sites in 2016 and believed that on an ongoing basis the volume would not be high. The 1,155 figure demonstrates that we continue to improve the accuracy of our data, albeit that the volume of gap sites being identified is not yet as high as anticipated.

C1.24. Systems thinking capability (PR19UU_E06-CF)

The 2018/19 shadow capability maturity level is 1, which is the same as the original App1 forecast maturity level.

C1.25. Successful delivery of direct procurement of Manchester and Pennine resilience (PR19UU_E07-DP)

This value was left blank in App1 and has been left blank within Table OC4. This is a new measure, which will only come in to effect in the AMP7 period.

C1.26. Strategic regional solution development (Severn Thames transfer) (PR19UU_E08-WR)

This value was left blank in App1 and has been left blank within Table OC4. This is a new measure, which would only come in to effect in the AMP7 period.

J002 – Outcomes

C1.27. Customers say that we offer value for money (PR19UU_E09-HH)

The 2018/19 shadow value of the percentage of customers who, when surveyed, are satisfied we provide value for money is 58%. This is slightly lower than the original APP1 figure of 59%.

C1.28. Sewer blockages (PR19UU_F02-WWN)

The 2018/19 shadow number of sewer blockages that have been reported and cleared is 21,865. This is slightly higher (worse) than the original APP1 forecast of 21,686 blockages.

C1.29. External flooding Incidents (PR19UU_G03-WWN)

The shadow number of external flooding incidents that occurred in 2018/19 is 6,139. This is lower (better) than the original APP1 forecast of 7,059 incidents. As set out above with respect to internal flooding incidents, 2018/19 was an atypically dry year.

The weather in 2019/20 is more typical with 2,994 incidents occurring in the first four months of the financial year.

C1.30. Raising customer awareness to reduce the risk of flooding (PR19UU_G04-WWN)

This value was left blank in App1 and has been left blank within Table OC4. This measure monitors the increased awareness of customers to their impact on the risk of flooding. The 2018/19 awareness was 28.3%. However, as the measure reviews the % increase from a baseline that will be set in 2019/20, the 2018/19 position relative to the baseline cannot be determined.

C1.31. Hydraulic internal flood risk resilience (PR19UU_G05-WWN), and

C1.32. Hydraulic external flood risk resilience (PR19UU_G06-WWN)

As set out in the UU Outcomes Performance Commitment appendix, published by Ofwat with the UU Draft Determination in April, the baselines for the internal and external hydraulic flooding measures are calculated in 2018-19.

We have now completed the 2018-19 calculation (subject to the required audit of the baseline position), which has led to an increase in the baselines for these two PCs, as a result of additional properties at risk being identified during the year. The number of modelled internal flooding incidents is now 61.04, compared with an initial forecast of 59.65. The number of modelled external flooding incidents is now 276.73, compared with an initial forecast of 272.58.

To allow the revised values for these two measures to be included within our Final Determination, we have set out the revised performance commitment levels, and associated changes in caps and collars, in an updated extract from the UU draft determination performance commitment appendix below. We have also updated the wording of a draft determination exclusion to the wording that was agreed by Ofwat on 14th June: *“Properties where construction is underway at 30th June 2019 and excluding 2019-20 planned hydraulic modelling for network investigations and modelling risk for proposed development.”*

Required amendments to UU Outcomes Performance Commitments Appendix

- a) Revised wording for inclusion in both PR19UU_ G05-WWN Hydraulic internal flood risk resilience and PR19UU_ G06-WWN Hydraulic external flood risk resilience

Specific exclusions	<p>The measure does not include flooding due to other causes such as blockages and collapses.</p> <p>Properties that have had previously completed schemes unless an intervention is deployed that creates additional sewer capacity beyond that provided by the original project therefore providing an additional modelled flood risk benefit.</p> <p>Properties where construction is underway at 30th June 2019 and excluding 2019-20 planned hydraulic modelling for network investigations and modelling risk for proposed development.</p>
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- b) Revised table for inclusion in PR19UU_ G05-WWN Hydraulic internal flood risk resilience

Performance commitment levels

	Unit	Company forecast	Committed performance level				
		2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Performance commitment level	Number		60.04	59.04	58.04	57.04	56.04
Enhanced underperformance collar	Number		NA	NA	NA	NA	NA
Standard underperformance collar	Number		78.04	78.54	79.04	79.54	80.04
Underperformance deadband	Number		NA	NA	NA	NA	NA
Outperformance deadband	Number		NA	NA	NA	NA	NA
Standard outperformance cap	Number		37.90	36.90	35.90	34.90	33.90
Enhanced outperformance cap	Number		NA	NA	NA	NA	NA

c) Revised table for inclusion in PR19UU_ G065-WWN Hydraulic external flood risk resilience

Performance commitment levels

		Company forecast	Committed performance level				
	Unit	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Performance commitment level	Number		254.53	232.33	210.13	187.93	165.73
Enhanced underperformance collar	Number		NA	NA	NA	NA	NA
Standard underperformance collar	Number		289.93	301.03	312.13	323.23	334.33
Underperformance deadband	Number		NA	NA	NA	NA	NA
Outperformance deadband	Number		NA	NA	NA	NA	NA
Standard outperformance cap	Number		153.43	131.23	109.03	86.83	64.63
Enhanced outperformance cap	Number		NA	NA	NA	NA	NA

C2 Additional measures recorded in Table OC2.3.

C2.1. Voids (PR19UU_E10-HH)

This is a new measure, which would monitor the number of household properties classified as void as a percentage of the total number of household properties served by the company. As this is a newly proposed performance commitment for United Utilities we did not directly forecast our 2018/19 position in our original App1. The 2018/19 shadow value is 6.82%, which is within our expectations of our performance for managing void properties.