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PR19 final determinations

Thames Water – Delivering outcomes for customers final decisions

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In our draft determinations we published the ‘[Delivering outcomes for customers actions and interventions](#)’ document for each company. This document set out the actions from our initial assessment of plans, a summary of the company’s response to the action, our assessment of the company’s response, and the interventions we made as part of the draft determination. It also set out any interventions that did not result from an initial assessment of plans action, which we made as part of the draft determination.

This final determination document sets out the decisions we make for the final determination in response to representations received on our draft determinations and any other changes for the final determination.

Table 1 below sets out the draft determination decisions on performance commitments that were the subject of representations from the company, a summary of the company representation, our assessment and rationale for the final determination decision and our decisions for the final determination. Table 2 sets out the draft determination decisions on performance commitments that were the subject of representations from other stakeholders, a summary of the other stakeholder representations, our assessment and rationale for the final determination decision and our decisions for the final determination. Table 3 sets out any changes for the final determinations that are not resulting from representations received relating to the company.

Each performance commitment has a unique reference. The prefix ‘PR19TMS’ denotes Thames Water.

For all other documents related to the Thames Water’s final determination, please see the [final determinations webpage](#).

Our ‘Outcomes performance commitment appendix’ for the company is published alongside this document. These documents are intended to be fully consistent. In the event of any inconsistency, then the ‘Outcomes performance commitment appendix’ takes precedence in all instances.

Table 1: Thames Water - Representations in response to the draft determination

Performance commitment	Type	Our intervention for the draft determination	Summary of company representation	Our assessment and rationale for the final determination decision	Decisions for the final determination
Water Quality Compliance (Compliance risk index) PR19TMS_BW06a	Performance commitment definition and level	<p>The intervention we made at draft determinations was to set a standard deadband which all companies were expected to adopt. The deadband profile for the Compliance Risk Index (CRI):</p> <p>2020-21 = 2.00 2021-22 = 2.00 2022-23 = 1.50 2023-24 = 1.50 2024-25 = 1.50</p> <p>Unit = Compliance Risk Index Score</p>	<p>The company adopts the draft determination deadband but with exclusion of metaldehyde from this common performance commitment definition.</p> <p>The company highlights that metaldehyde failures (as defined within the CRI) are extremely volatile, distorting the overall metric. For example, a single metaldehyde exceedance at one of its large London treatment works can generate a CRI score of 1.50. Individual results such as this can make CRI very volatile, especially when compared against the CRI score excluding metaldehyde failures. In recent years, it has seen where its overall CRI score has exceeded 40, with 39 points of the overall score coming from metaldehyde failures, none of which resulted in harm to customers. It states</p>	<p>Change for the final determination.</p> <p>We consider that the standard definition has been set after collaborative work between the industry and the Drinking Water Inspectorate (DWI), as such we assess that it is suitable to retain the collaboratively derived definition. We consider that introducing any exclusions may act as a disincentive to continuous improvements in companies’ performance.</p> <p>The company does not provide sufficient evidence to show where metaldehyde failures have resulted in poor performance historically. Data from the DWI shows that the company’s historical performance as: 5.25 in 2016, 1.22 in 2017 and 1.95 in 2018. This shows that in two out of the last three years performance has been better than the deadband level of 2.00. This was including metaldehyde in the CRI definition. Therefore we consider that the company</p>	<p>The following is a sector wide change to the draft determinations.</p> <p>We set a revised standard deadband for all companies. The deadband profile for the Compliance Risk Index is:</p> <p>2020-21 = 2.00 2021-22 = 2.00 2022-23 = 2.00 2023-24 = 2.00 2024-25 = 2.00</p> <p>Unit = Compliance Risk Index Score</p>

			<p>that metaldehyde failures rarely result in any kind of customer detriment and the levels of metaldehyde it detects do not present a risk to public health, nor do they impart any aesthetic issues to the drinking water. It considers that metaldehyde is a regulatory compliance issue and not a public health issue.</p> <p>It acknowledges our approach of setting a glide-path with the expected Metaldehyde ban, but with the ban being over-turned, it points out that we should reconsider this in setting performance commitment levels. Nevertheless, it intends to work with farmers through its catchment management approach to mitigate this risk in the long term.</p> <p>The company proposes three alternatives to our approach on CRI:</p> <ol style="list-style-type: none"> 1) One CRI measure for metaldehyde (with a collar) and one for all other determinands excluding Metaldehyde; 2) Our draft determination proposal for a single CRI measure, but exclude Metaldehyde from the CRI definition. For consistency this should be applied to all companies; or 3) Our draft determination proposal for a single CRI measure but exclude metaldehyde failures for assessing underperformance payments. For consistency this should be applied to all companies. <p>The company's preferred option is 3.</p>	<p>does not provide sufficient or convincing evidence to support the exclusion of metaldehyde from the performance commitment definition.</p> <p>We revise the deadband on the Compliance Risk Index to a score of 2.00 throughout the period reducing the risk of underperformance payments in the last three years of the 2020-25 period. This allows more flexibility in performance to take into account the uncertainty created by the ban on the use of metaldehyde being overturned by the High Court and also aligns with the median level of current company performance.</p> <p>We analyse the company data from 2016, 2017 and 2018 and note that the median for all companies for these years respectively is 2.83, 2.31 and 2.09. This suggests that a deadband of 2.0 is appropriate and the data suggests an improving trend. A deadband set at the levels we are proposing allows for some fluctuation in performance, whilst providing a strong incentive to minimise compliance failures.</p> <p>Please refer to the 'Delivering outcomes for customers policy appendix' for more detail on this sector wide change.</p>	
<p>Water Supply Interruptions</p> <p>PR19TMS_BW03</p>	<p>Performance commitment levels</p>	<p>The intervention we made was to set performance commitment levels that are consistent with the rest of the industry for supply interruptions. These levels are:</p> <p>2020-21 = 00:05:24 2021-22 = 00:04:48</p>	<p>The company proposes a new profile:</p> <p>2020-21 = 00:08:24 2021-22 = 00:07:48 2022-23 = 00:07:12 2023-24 = 00:06:36 2024-25 = 00:06:00</p>	<p>Change for the final determination.</p> <p>Based on evidence from all companies, we adjust the water supply interruptions 2024-25 level to five minutes, with an amended glidepath in the first four years, taking account of wider evidence to calibrate stretch of performance commitment for an efficient company.</p>	<p>The following is a sector wide change for the final determination.</p> <p>We set performance commitment levels that are consistent with the rest of the industry for supply interruptions. These levels are:</p> <p>2020-21 = 00:06:30 2021-22 = 00:06:08</p>

		<p>2022-23 = 00:04:12 2023-24 = 00:03:36 2024-25 = 00:03:00</p> <p>Units = Hours:minutes:seconds (HH:MM:SS) per property per year</p>	<p>Units = Hours:minutes:seconds (HH:MM:SS) per property per year</p> <p>It states that it has concerns over the achievability of the 3 minute performance commitment level (it says that only two companies have ever achieved it). It also states that the methodology used by different companies to calculate performance (against the common definition) is not comparable and invalidates the performance commitment level (the company uses the outputs of post event modelling as well as start/stop times obtained from telemetry and customer contacts. If only start/stop times were used it would improve the company's performance by 4 minutes compared to the method it uses).</p> <p>The company states that there are specific exogenous factors to its region that have not been considered, those are:</p> <p>Highest density of properties: It states that it has the highest density of connections in the sector, this means that when there is an asset failure, a greater number of properties are affected than if it operated in a more typical operating environment. The difference becomes even more pronounced when London is considered, this is driven in part by the prevalence and size of tower blocks in London.</p> <p>Slowest road traffic: The company provides evidence from the Department of Transport to show that within London: congestion results in about 40 minute delay to a 20 mile journey, and with an average speed of 14.5 miles per hour, it shows that it will take Thames Water over 80 minutes to travel 20 miles to get to the site of a burst.</p> <p>Oldest asset base: The company indicates that its assets are proportionately the oldest in the industry thus this is a contributing factor (along with other factors such as topography, asset configuration, soil types, etc.) affecting its supply interruption performance. The company states that it has the highest number of mains</p>	<p>Please refer to the 'Delivering outcomes for customers policy appendix' for more detail on this sector wide change.</p> <p>The company states that different companies use different methodologies. All companies confirm through shadow reporting that their reporting is compliant against the standard definition. The company does not provide any new evidence to underpin its claims.</p> <p>The company specifies three company specific factors:</p> <ol style="list-style-type: none"> 1) Highest density of properties: We assess that the company does not provide sufficient evidence to justify that it has unique operating circumstances relative to other companies that also have high density population. The company's 2015-20 definition of the measure required it to return properties to greater than 5m head of pressure, the PR19 common definition requires properties to be returned to 3m head of pressure which makes it easier for the company to achieve its performance levels, particularly in the case of high elevation buildings. We also consider that the issue of high density population and high rise buildings is not new and the company's systems should be configured to minimise the impacts of interruptions to supply. 2) The slowest moving traffic in the London region: While we acknowledge that traffic is slower moving in London, the company itself indicates that the urbanised areas of Reading and Slough in its operating area also suffer similar performance to London, as such we consider that other large urbanised areas across the country would also see increased traffic delays and reduced speeds. Other companies also have factors such as remote rural locations, therefore we do not consider that higher traffic in London is a sufficient reason allow for a company specific change to the performance levels. 3) The oldest asset base in the sector: The company has the ability to plan mitigation and should already have mitigation plans in place using historical data and knowledge of assets to reduce supply interruptions. <p>The company's historical performance on supply interruptions is comparable with the rest of the sector and does not indicate a significant disadvantage because of its</p>	<p>2022-23 = 00:05:45 2023-24 = 00:05:23 2024-25 = 00:05:00</p> <p>Units = Hours:minutes:seconds (HH:MM:SS) per property per year</p>
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			<p>repairs in the sector, reflecting its historical asset base, and with a greater number of bursts, there is a greater potential scope for supply interruptions.</p> <p>The company states that the difference in operating circumstances was reflected by us (to some degree) during 2015-20 period, where it was allowed a variation to the standard supply interruption measure; instead of counting interruptions greater than three hours, Thames Water has a bespoke measure of interruptions greater than four hours.</p>	<p>London operating area or older asset base. Therefore, on balance, we do not consider that there are significantly unique operating factors for Thames Water, however as set out above we apply a sector wide change to the performance commitment levels.</p>	
<p>Water Supply Interruptions</p> <p>PR19TMS_BW03</p>	<p>ODI rates</p>	<p>We changed the underperformance payment rate to -£1.970m per minute per property, due to concerns with the company's past performance. The outperformance rate was set to £1.415m, the rate proposed by the company.</p>	<p>The company states that the underperformance payment rate proposed in the draft determination is not based on customer research. It proposes that we revert to the underperformance payment (-£1.70m per minute per property) included in its April business plan.</p>	<p>Change for the final determination.</p> <p>The company challenges our methodology for using the industry reasonable range to intervene on companies' incentive rates on the basis that this overrides customer research. As articulated in our overall response to this methodological challenge in the 'Delivering outcomes for customers policy appendix', we consider customer research important but only one element in assessing incentive rates. Where we have concerns that customer protection is not sufficient and that the company may have a credible incentive to understate rates, we intervene to adjust rates. We consider that using the industry average to uplift Thames Waters' rate is appropriate – the industry average provides a reasonable external source of information. The company does not provide a justification or response to our past delivery concerns in its representation.</p> <p>When considering the performance commitment package as a whole, we consider whether the balance of incentives for particular performance commitments is appropriate at both an industry and company level.</p> <p>We set all companies' underperformance rates symmetrically to outperformance rates to provide a more balanced spread of incentives and risk on water supply interruptions. For further details on our approach to sector wide interventions on ODI rates see our 'Delivering outcomes for customers policy appendix'.</p>	<p>We change the underperformance payment rate to -£1.415m per minute per property.</p>

<p>Water Supply Interruptions</p> <p>PR19TMS_BW03</p>	<p>Caps, collars and deadbands</p>	<p>Our intervention at draft determinations was to set collar levels as follows:</p> <p>2020-21 = 00:21:36 2021-22 = 00:21:36 2022-23 = 00:21:36 2023-24 = 00:21:36 2024-25 = 00:21:36</p> <p>Unit = Hours:minutes:seconds (HH:MM:SS) per property per year</p> <p>Our intervention at draft determinations was to set cap levels as follows:</p> <p>2020-21 = 00:04:59 2021-22 = 00:04:20 2022-23 = 00:03:46 2023-24 = 00:03:10 2024-25 = 00:02:43</p> <p>Unit = Hours:minutes:seconds (HH:MM:SS) per property per year</p>	<p>The company considers that using a multiplier approach is inappropriate. The multiplier used varies by performance commitment, which has not been explained or justified. It states that it lacks consistency providing greater risk for some measures, which may result in incentives that conflict with customer priorities.</p> <p>The company proposes an underperformance collar as per its April 2019 business plan (14 minutes, 42 seconds)</p>	<p>Change for the final determination.</p> <p>We respond to points the company makes in the 'Delivering outcomes for customers policy appendix' and explain how we set the level of caps and collars in the final determination.</p> <p>The company's collar levels have changed because of the change in performance commitment levels and also the change in the multiplier.</p> <p>The company cap levels are based on the estimate of P90 performance that we have changed.</p>	<p>We set underperformance collars to the following levels:</p> <p>2020-21 = 00:22:45 2021-22 = 00:22:45 2022-23 = 00:22:45 2023-24 = 00:22:45 2024-25 = 00:22:45</p> <p>Unit = Hours:minutes:seconds (HH:MM:SS) per property per year</p> <p>We set cap levels to:</p> <p>2020-21 = 00:03:51 2021-22 = 00:03:34 2022-23 = 00:03:16 2023-24 = 00:02:59 2024-25 = 00:02:41</p> <p>Units = Hours:minutes:seconds per property per year</p>
<p>Leakage</p> <p>PR19TMS_BW04</p>	<p>Performance commitment levels</p>	<p>The intervention we made at draft determination was to set the performance commitment percentage reduction levels to the following values:</p> <p>2020-21 = 5.0% 2021-22 = 12.5% 2022-23 = 17.3% 2023-24 = 21.2% 2024-25 = 25.0%</p> <p>Units: Percentage reduction from 2019-20 baseline using 3 year average (%).</p>	<p>The company proposes a change to the draft determination. It proposes to retain its 20% reduction performance commitment level.</p> <p>The company expresses its concern that our draft determination appears to single out the company for tougher treatment and when leakage is viewed using alternative metrics, for example, leakage as a percent of distribution input, then its performance is not an outlier. This concern is illustrated by a chart showing that the company is the second worst performer after United Utilities.</p> <p>The company considers that historical leakage performance for other companies has not displayed reductions at the levels proposed by it and states that over the last 8 years, no</p>	<p>Change for the final determination.</p> <p>The performance of the company has been particularly poor and it is one of several companies that need to rectify poor performance and continue to reduce leakage beyond 2020. The company is not meeting its leakage targets in PR14 (except for 2015-16) expressed in absolute levels (MI/d) and is comparatively a poor performer using two normalised metrics (litres per property per day and m³ per kilometre of main per day). While there is no single leakage performance indicator, the alternative proposed metric is not appropriate and we and numerous bodies (e.g. Water UK, CIWEM policy position statement, EU report on Good Practices on Leakage Management) do not recommend comparing performance using it therefore we consider it is not a valid comparative metric. This is because an increase in consumption, for example because of a sustained hot, dry period, will appear to lead to an improvement in leakage levels while there has not been</p>	<p>We set performance commitment levels to the following values:</p> <p>2020-21 = 4.1% 2021-22 = 10.2% 2022-23 = 14.1% 2023-24 = 17.4% 2024-25 = 20.4%</p> <p>Units: Percentage reduction from 2019-20 baseline using 3 year average (%).</p>

			<p>company has achieved a double-digit leakage reduction.</p> <p>The company states there are a number of factors that specifically drive costs for Thames Water and make its leakage reduction more challenging (clay soil, age of assets, percentage of metering, percentage of joints). The company then presents a range of costs to illustrate the totex impact of moving from 20% to 25% leakage reduction and seeks enhancement expenditure for leakage.</p>	<p>any reduction in the volume of water lost. Likewise, a successful water efficiency campaign will reduce the amount of water used and leakage will appear to increase. On this basis, the alternative metric the company proposes is considered volatile and not fit for purpose.</p> <p>Our approach follows the PR19 methodology which states companies should set their proposed performance commitment levels and challenge themselves to achieve forecast upper quartile in relation to litres per property per day and per km of main per day or justify why not. This is because these are accepted normalised metrics used by the UK water industry. The company uses annual values to illustrate that no company achieved a double-digit reduction but when these are converted to three-year averages for consistency with PR19 performance commitment levels three companies (Anglian Water, Severn Trent Water and Dŵr Cymru) historically achieved double-digit reductions over a 5 year time period.</p> <p>Thames Water achieved a 2% reduction during the 2010-15 period (based on PR09 definitions) and a 6% increase during the 2015-20 period to date (based on PR14 definitions). The company achieved its biggest reduction of 27% during the 2005-10 period (based on PR04 definitions) however, we accept this may have been aided by a large scale mains replacement programme. We consider the scale of change to be stretching but are careful about historical comparisons of achievability due to potential impact of past mains replacement funding We expect ambition in companies' proposals because we were concerned that the Sustainable Economic Levels of Leakage (SELL) approach used previously to set reduction performance commitment levels have not driven sufficient improvements in recent years. Thames Water has performed poorly on leakage in 2015-19, therefore have larger improvements to make compared to others and customers should not pay additional amounts for company to catch up in 2020-25 due to poor performance in the current period.</p> <p>The company states it has specific challenges related to its own assets and regions, for the final determination we are making a conditional allowance of up to £300m of enhancement expenditure for the company to improve in the performance of the London water network (see 'PR19 final determinations: Thames Water - Cost efficiency</p>	
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				<p>additional information appendix' for more information on the cost enhancement allowance). We have not taken this improvement programme into account when setting the 20.4% performance commitment level and we will reset the company's performance commitment level for leakage once funding gateways have been agreed. We expect leakage targets to be stretching for all companies. Improvement in performance in recent years has been modest across the sector and has deteriorated for Thames Water.</p> <p>The company proposes a 20% reduction in leakage. On a 3 year average actual 19-20 baseline basis its 20% reduction aligns with the company's Section 19 undertaking commitment. Since we consider this to be stretching, we change the draft determination performance commitment levels to a 20.4% reduction in 2024-25. This reduction is derived to 1 decimal place for consistency with our definition and based on the company's three-year average 2019-20 and 2024-25 values of 714.0 and 568.0 M/d respectively.</p>	
<p>Leakage PR19TMS_BW04</p>	<p>Caps, collars and deadbands</p>	<p>Our intervention at draft determination was to set collar levels as follows:</p> <p>2020-21 = -10.0 2021-22 = -10.0 2022-23 = -10.0 2023-24 = -10.0 2024-25 = -10.0</p> <p>Units: Percentage reduction from 2019-20 baseline using 3 year average (%).</p> <p>Our intervention at draft determination was to set cap levels as follows:</p> <p>2020-21 = 7.3 2021-22 = 14.8 2022-23 = 21.9 2023-24 = 25.9 2024-25 = 29.6</p>	<p>The company has two concerns about a 10% collar relative to its baseline. The company argues the collar results in a disproportionate exposure in relation to other measures and that its customer research confirmed that no single PC measure should dominate. Therefore, the company believe that the draft determination's collar level exposure should be reduced and proposes that the collar should be reduced to 5%, which results in a return on regulatory equity across 2020-25 of 0.9%. The company states the draft determination proposed collar for Thames Water is wider than the collars proposed for other companies and that Thames Water appears to have been singled out for tougher treatment.</p>	<p>Change for final determination.</p> <p>The performance of the company has been particularly poor in recent years. There is a risk that the company will fail to deliver its 2015-2020 leakage performance commitments and could continue to do so in the 2020-25 period. We therefore consider it is proportionate to protect Thames Water customers with a collar that will only bite at relatively poor levels of performance, noting that we are setting a tighter collar for other companies. We do not consider that this will dominate its package of performance incentives, having compared the implied P10 payments arising from this performance commitment against those of Thames Water's other performance commitments. We therefore retain the draft determination collar at -10% (meaning that leakage is 10% higher than its baseline 2019-20 level) in all years.</p> <p>The levels for the outperformance cap are based on estimates of the P90 performance, which has changed. Our approach to adjusting the estimates of P10 and P90 performance levels is set out in 'Delivering outcomes for customers policy appendix'.</p>	<p>We set cap levels to:</p> <p>2020-21 = 7.4 2021-22 = 14.9 2022-23 = 18.8 2023-24 = 22.1 2024-25 = 25.1</p> <p>Units = Percentage reduction from 2019-20 baseline using 3 year average (%).</p>

		Units: Percentage reduction from 2019-20 baseline using 3 year average (%).			
Mains Repairs PR19TMS_BW01	Performance commitment level	<p>The intervention we made at draft determination was to set the performance commitment levels to the following values:</p> <p>2020-21 = 231.3 2021-22 = 231.3 2022-23 = 231.3 2023-24 = 231.3 2024-25 = 231.3</p> <p>Units: Number of mains repairs per 1,000km</p>	<p>The company proposes new performance commitment levels compared to the draft determination. The levels are:</p> <p>2020-21 = 261.3 2021-22 = 253.5 2022-23 = 245.9 2023-24 = 238.5 2024-25 = 231.3</p> <p>Units: Number of mains repairs per 1,000km</p> <p>The company states it may be possible to achieve our draft determination 2024-25 level, but considers that our approach fails to take into account the impact of leakage reduction and weather. The company states that the draft determination performance commitment level based on its best performing three years is exceptionally challenging because the three years selected were not average years, and it has a major leakage reduction programme in during the 2020-25 period which will result in more mains repairs. It also considers that in its three best years it experienced better weather conditions, with milder summers and winters, which pose the least threat to pipes. The company states that it will focus on a 'Calm Systems' approach to help deliver its mains repairs as part of its long-term vision and this will take time to implement, thus it proposes a new glidepath profile to get there.</p> <p>The company is concerned that we do not consider there to be correlation between active leakage reduction and total mains repairs, which it states was established by a 2019 UK Water Industry Research (UKWIR) study, and that we appear to believe that there is an inverse relationship between increased leakage reduction and reactive mains repairs.</p>	<p>Change for the final determination.</p> <p>The company states that the three years used by us were the best years for mains repairs in the last seven years, whereas in 2014-15, 2016-17 and 2017-18, it experienced worse weather conditions with harsher winters, which led to significant numbers of reactive mains repairs. The company makes a statement without providing any evidence of weather observed in its region and its impact on mains repairs. For this reason we do not find the evidence convincing. However, we consider our approach further and at final determination we amend the base levels of mains repairs (before the leakage allowance is added) to an average of the best five years performance. We now consider the use of best five historical years to set the forward looking base level provides a more representative performance level (than three years).</p> <p>Based on the data and evidence provided by several companies, our conclusion is that there is a link between increasing pro-active mains repairs and reducing leakage. However, the data is too inconsistent and inconclusive on reducing reactive repairs to enable quantification of the future impact on leakage levels by conducting additional mains repairs. Therefore we will increase the performance commitment levels for mains repairs by a reducing percentage, for all companies, in all years, making it easier to achieve. The aim is to allow all companies the flexibility to deliver the improvement in leakage reduction, allowing more flexibility in the earlier years to use proactive mains repairs to reduce leakage.</p> <p>Please refer to the 'Delivering outcomes for customers policy appendix' for more detail on this sector wide change.</p>	<p>We set the performance commitment levels to the following values:</p> <p>2020-21 = 265.9 2021-22 = 262.2 2022-23 = 258.5 2023-24 = 254.8 2024-25 = 251.1</p> <p>Units: Number of mains repairs per 1,000km</p>

<p>Mains Repairs</p> <p>PR19TMS_BW01</p>	<p>ODI rates</p>	<p>At draft determination we intervened to increase the company's underperformance payment rate to -£0.414 million per 1000km of mains.</p>	<p>The company states that it disagrees with us increasing its underperformance rate to the upper bound of the reasonable range due to it being a comparatively poor performer</p> <p>The company states that it is not a poor performer when the impact of London is taken into account and refers to the detailed background in its April business plan, relating to soil corrosiveness, age of mains and greater loadings due to traffic.</p> <p>The company claims that the total underperformance payment potential is disproportionate and could distort against customer priorities. It states that the draft determination's P10 financial exposure on mains repairs is more than double that of the next largest performance commitment. The company claims that retaining such a significant underperformance rate and collar for mains repairs would unduly incentivise its focus away from other measures, such as supply interruption.</p> <p>The company proposes that we adopt its April business plan underperformance rate, as this was based on its customer valuations. The company proposes a rate of £0.177 million per the number of repairs per 1,000 km of mains</p>	<p>Change for the final determination.</p> <p>The company does not provide additional evidence in its representation of how London impacts its performance and refers to information set out in its London network maintenance cost adjustment claim submitted in April.</p> <p>The evidence in the company's cost adjustment claim sets out analysis of the difference between soil conditions in London compared to England and Wales rather than evidence that it is an outlier compared to other companies. The company does not provide a comparison of its conditions and other company's conditions. The age of mains argument the company makes in itself does not necessarily imply a worse condition or higher maintenance costs. We do not consider this sufficient evidence to change our view of our draft determination intervention due to poor past performance.</p> <p>When considering the performance commitment package as a whole, we consider whether the balance of incentives for particular performance commitments is appropriate at both an industry and company level. We set all companies' underperformance rates at the normalised (per household) industry average on mains repair to provide a more balanced spread of incentives and risks across the company's performance commitments. This will ensure the company does not overly focus on mains repairs to the detriment of other performance commitments which will benefit its customers. For further details on our approach to sector wide interventions on ODI rates see our 'Delivering outcomes for customers policy appendix'.</p>	<p>We change the company's underperformance rate to -£0.286m/ number per 1,000km of mains</p>
<p>Risk of severe restrictions in a drought</p> <p>PR19TMS_DW01</p>	<p>Performance commitment level</p>	<p>The intervention we made at draft determination was a sector wide action:</p> <p>The company should provide a full set of intermediate calculations (at a zonal level), for the underlying risk calculation (both baseline levels and performance commitment).</p> <p>The company should confirm that its performance</p>	<p>The company provides the requested intermediate calculations at a zonal level and confirms that the performance commitment levels align with its updated revised draft Water Resources Management Plan.</p> <p>The company indicates that nine programmes of work could impact its risk profile forecasts to provide surplus that delivers 1 in 200 year drought protection in all of its Water Resource Zones by 2030-31.</p>	<p>No change for the final determination.</p> <p>While the company does not propose improvement over the 2020-25 period, the company does propose improvement to zero by 2030. We consider that this aligns with the company's Water Resources Management Plan, which indicates that delivery of the Deephams reuse scheme (45 Ml/d) and the Oxford Canal raw water transfer (15 Ml/d) in 2030 will maintain security of supply in London during the early part of the 80-year planning period and improve resilience against severe 1 in 200 year drought events. The results of other investigations will help inform a decision in 2022-23 on which schemes to promote to</p>	<p>N/A</p>

		<p>commitment levels are reflective of their water resources management plan position. This should include the potential that they will have access to drought orders and permits</p> <p>The company should confirm which programmes of work will impact its risk profile forecasts.</p>		<p>maintain security of supply throughout the planning period.</p> <p>The company provides sufficient evidence and we retain our draft determination performance commitment levels.</p>	
<p>Risk of sewer flooding in a storm</p> <p>PR19TMS_DS01</p>	<p>Performance commitment level</p>	<p>At draft determination we intervened to set out that the company should confirm that it is:</p> <ul style="list-style-type: none"> (i) using the updated parameters in the catchment vulnerability assessment (and setting out any additional criteria that it intends to use); (ii) reporting the extent to which it uses 2D or simpler modelling; and (iii) adopting FEH13 rainfall as standard, and if not, when it expects to do so. 	<p>The company provides additional information as part of its 2019 Annual Return shadow reporting submission. In this the company states:</p> <ul style="list-style-type: none"> (i) No 2D models were used for this assessment. (ii) FEH13 rainfall has been applied to the models. (iii) The majority of catchments are Vulnerability Grade 4, typically due to high population density and historical flooding. 	<p>No change for the final determination.</p> <p>The company provides the full reporting tables and clarifications regarding 2D model coverage, FEH13 rainfall and consistency with the guidance in its query response. We consider that the company provides sufficient evidence to demonstrate it has high model coverage and a low percentage of its population at risk. As such, we retain the draft determination performance commitment levels.</p>	<p>N/A</p>
<p>Internal sewer flooding</p> <p>PR19TMS_CS03</p>	<p>Performance commitment levels</p>	<p>The intervention we made at draft determinations was to set performance commitment levels that are consistent with the rest of the industry for internal sewer flooding. These are:</p> <p>2020-21 = 1.68 2021-22 = 1.63 2022-23 = 1.58 2023-24 = 1.44 2024-25 = 1.34</p>	<p>The company proposes a new glide path profile, retaining our draft determination upper quartile performance commitment level for 2024-25:</p> <p>2020-21 = 1.89 2021-22 = 1.81 2022-23 = 1.65 2023-24 = 1.50 2024-25 = 1.34</p> <p>Units: internal sewer flooding incidents per 10,000 properties</p> <p>The company indicates that this is an extremely ambitious performance commitment level and is</p>	<p>No change for the final determination.</p> <p>The company's representation does not provide any further information to support its statement that 'it is effectively at upper quartile performance in respect of incidences of hydraulic flooding'. We are unable to evidence this statement, as overall the company sits below the upper quartile performance for internal sewer flooding.</p> <p>The company's actual 2018-19 performance level was 2.14 incidents per 10,000 sewer connections, which is in line or better than the performance of other companies. We do not consider that having more cellars than other companies is sufficient evidence to allow worse performance, as other companies have factors specific to them that impact their performance, such as higher rainfall</p>	<p>N/A</p>

		<p>Units: internal sewer flooding incidents per 10,000 properties.</p>	<p>requesting a company specific adjustment to the glidepath.</p> <p>The company states that it is effectively at upper quartile performance in respect of incidences of hydraulic flooding and there is little scope with a region of its size of improving upon this position. The company would therefore have to focus on ‘Other Cause’ flooding and would rely on significant improvements being identified from the company’s sewer monitor roll out. Other Cause flooding would need to halve over the 2020-25 period in order to meet the upper quartile performance. The company’s April 2019 business plan detailed a blend of ‘traditional’ and ‘new technology’ (sewer depth monitors) to deliver the 20% improvement in its plan. To achieve the upper quartile profile (32% improvement), the company considers it will be required to make greater use of sewer depth monitors as part of its move to network digitalisation. The company states that sewer depth monitors are starting to yield benefits, but this approach is not yet at a state of maturity anywhere in the industry to be used with confidence, and the scale of activity required, essentially a five-fold increase in sewer depth monitors, means that this scenario carries significant operational and delivery risks.</p> <p>The company states that higher property density, greater ubiquity of basements, and the amount of fat in its sewerage networks are key differences between Thames Water’s region and other companies’ operating circumstances that make it much more challenging for the company to perform to the same performance commitment level on sewer flooding as other companies.</p>	<p>rates. We consider the challenges it faces in London related to sewer blockages (a key cause of internal flooding) are also applicable to other companies that have high density population areas, and therefore are not unique to Thames Water.</p> <p>On balance, the evidence provided is not sufficient or convincing to justify company specific reasons for not accepting our proposed glide path and we can identify no other reason why we should make a change.</p>	
<p>Internal sewer flooding</p> <p>PR19TMS_CS03</p>	<p>ODI rates</p>	<p>No intervention at draft determination.</p>	<p>The company states that, although we said in the draft determination that we were not intervening in its ODI rates, we have in fact over-written its rates from the April business plan submission in its outcomes performance</p>	<p>Change for the final determination.</p> <p>The company presents no new evidence or rationale for changing our draft determination. It also notes that the normalised ODI rate is unchanged.</p>	<p>We change the company’s underperformance rate to -£16.762m per incident per 10,000 connections.</p>

			<p>commitment appendix. It requests that these rates are re-instated.</p> <p>Following a query, the company clarifies that it agrees its normalised rates are unchanged to 3 decimal places (-£21.635m and £16.762m per 10,000 connections for underperformance and outperformance rates respectively). The company notes in the query response that it had previously raised its disagreement with normalising the performance commitment measurement.</p>	<p>However, when considering the performance commitment package as a whole, we consider whether the balance of incentives for particular performance commitments is appropriate at both an industry and company level. We set all companies' underperformance rates symmetrically to outperformance rates to provide a more balanced spread of incentives and risk on internal sewer flooding. For further details on our approach to sector wide interventions on ODI rates see our 'Delivering outcomes for customers policy appendix'.</p>	
<p>Internal sewer flooding</p> <p>PR19TMS_CS03</p>	<p>Caps, collars and deadbands</p>	<p>Our intervention at draft determination was to set collar levels as follows:</p> <p>2020-21 = 3.35 2021-22 = 3.35 2022-23 = 3.35 2023-24 = 3.35 2024-25 = 3.35</p> <p>Units: number of incidents per 10,000 sewer connections</p> <p>Our intervention at draft determination was to set cap levels as follows:</p> <p>2020-21 = 1.43 2021-22 = 1.35 2022-23 = 1.28 2023-24 = 1.20 2024-25 = 1.13</p> <p>Units: number of incidents per 10,000 sewer connections</p>	<p>The company proposes an underperformance collar as per its April 2019 business plan. It is concerned that:</p> <ul style="list-style-type: none"> increasing the collar level removes protection against factors outside our control, and its April 2019 business plan collars responded to customer research that while mixed there was some recognition that our performance on this measure could be higher (lower) as a result of weather conditions being (un)favourable. <p>The company is requesting that if the April 2019 underperformance collar is not reinstated, then extreme weather events are excluded from the calculation of any underperformance payments.</p>	<p>Change for final determination.</p> <p>We respond to points the company makes on factors outside management control in the 'Delivering outcomes for customers policy appendix' and explain how we set the level of caps and collars in the final determination. We do not consider it is appropriate to exclude extreme weather events from the calculation of underperformance payments.</p> <p>While customer views are important it is also necessary to consider whether the collars provide appropriate incentives. We consider that the collars the company proposed would not give sufficient incentive for the company to adequately prepare for high impact low probability events. The company has not addressed this issue in its response to the draft determination. We therefore consider that the collar the company proposed does not give sufficient incentive and propose to continue to set the collar on a multiple of the service level.</p> <p>The company cap levels are based on the estimate of P90 performance that we have changed.</p>	<p>We set outperformance caps to the following levels:</p> <p>2020-21 = 1.22 2021-22 = 1.17 2022-23 = 1.13 2023-24 = 0.99 2024-25 = 0.90</p> <p>Units: number of incidents per 10,000 sewer connections</p>
<p>Pollution Incidents</p> <p>PR19TMS_ES01</p>	<p>ODI type</p>	<p>In our draft determination we intervened to remove the outperformance payment...</p>	<p>The company considers that the removal of outperformance payments takes away any scope for rewards, thus reducing its incentives to stretch its performance on an area that it has historically performed strongly on. It states that this does not align with the value that its customers place on this measure, and with their</p>	<p>No change for the final determination.</p> <p>Outperformance financial incentives require evidence of customer benefit, customer support and stretching performance commitment levels.</p> <p>Our assessment at draft determination was to disallow outperformance payments, on the basis that the</p>	<p>N/A</p>

			<p>support for using enhanced rates to further incentivise its performance.</p> <p>Where we removed the outperformance rate, Thames Water states outperformance incentives play a key role in incentivising companies to improve their performance towards and beyond performance commitment levels. The company states that although customer support for outperformance is mixed, there is broad customer support for enhanced payments, which the company interprets as customers recognising the need for strong incentives for this measure.</p>	<p>company's most recent (2018) deliberative research shows that a small majority felt outperformance payments were not needed for pollution incidents. The company notes that a material minority strongly favoured outperformance payments.</p> <p>The company's (2018) deliberative research report includes one paragraph on customer views on financial incentives for pollution incidents. This states 'Most [customers] feel that an outperformance incentive is not needed as the reputational fallout from this combined with a penalty means that TW is likely to take this seriously. Some customers wanted outperformance payments here, to provide a strong incentive for Thames Water to improve in this area.' This is clear evidence that most customers do not support outperformance payments for this performance commitment, in the main piece of relevant research cited by the company. We consider this to be more relevant than the company's statement that there is broad support for enhanced payments (which is not specific to this performance commitment).</p> <p>We consider that the evidence shows that customers do not support outperformance payments for this measure.</p>	
<p>Pollution incidents</p> <p>PR19TMS_ES01</p>	<p>ODI rates</p>	<p>In our draft determination we intervened to set the underperformance payment rate to -£1.270 million per incident per 10,000km of sewer.</p>	<p>The company states that extreme weather has a great impact on performance in this area and that the increased underperformance rate (combined with our removal of the collar) leads to excessive risk. The company states that our new underperformance rate is materially higher than the one it proposed.</p> <p>The company requests us to reinstate its proposed April 2019 revised business plan underperformance rates of -£0.865 million.</p>	<p>No change for the final determination.</p> <p>The company does not provide sufficient evidence or explanation for why it reduced its underperformance rate from its September 2018 business plan to the level in its April 2019 revised business plan. The company's April 2019 revised business plan underperformance rate is outside our reasonable range.</p> <p>In our draft determinations we intervened to set the rate at the average of the company's September 2018 and its 2015-20 period rates in line with our 'PR19 draft determinations: Delivering outcomes for customers policy appendix'. We noted that the company's customers' willingness to pay has not changed since 2015-20 period. The company does not provide sufficient and convincing evidence for changing its rate, citing only that extreme weather affects performance, and does not explain how its proposed rate benefits its customers. We also note that we add a collar to this performance commitment - see PR19TMS_ES01 below.</p>	<p>N/A</p>

<p>Pollution incidents PR19TMS_ES01</p>	<p>Caps, collars and deadbands</p>	<p>Our intervention at draft determination was to remove the caps and collars for this performance commitment.</p>	<p>The company regards the removal of collars as unreasonable. It states that:</p> <ul style="list-style-type: none"> • It fully exposes companies to underperformance on pollution incidents. This is unreasonable given the susceptibility of performance on this measure to extreme weather events; • The test for financial materiality is too dogmatic. Some protection is appropriate; and • It considers that as at least some customers felt that it would be unfair for us to be punished for unpredictable weather that customers do not oppose the use of collars where this protects us against very significant impacts of extreme weather that we cannot mitigate. <p>It proposes the caps and collars are included as set out in its April 2019 revised business plan.</p>	<p>Change for the final determination.</p> <p>As we explain in the 'Delivering outcomes for customers policy appendix' we consider that the company should have collars for pollution incidents. In the appendix we also explain how we set the level collars in the final determination.</p>	<p>We set underperformance collars to the following levels:</p> <p>2020-21 = 36.76 2021-22 = 36.76 2022-23 = 36.76 2023-24 = 36.76 2024-25 = 36.76</p> <p>Units: Number of incidents per 10,000km</p>
<p>Clearance of blockages PR19TMS_CS04</p>	<p>Caps, collars and deadbands</p>	<p>Our intervention at draft determination was to set collar levels as follows:</p> <p>2020-21 = 145,000 2021-22 = 145,000 2022-23 = 145,000 2023-24 = 145,000 2024-25 = 145,000</p> <p>Units: Number of sewer blockage events that required clearing.</p> <p>Our intervention at draft determination was to set cap levels as follows:</p> <p>2020-21 = 68,788 2021-22 = 63,788 2022-23 = 63,788 2023-24 = 63,788 2024-25 = 58,788</p>	<p>The company considers that the maximum underperformance payment is disproportionate and is greater than that for pollution or internal sewer flooding. It proposes that we reinstate the collars with P10 values rather than the proposed levels.</p> <p>Alternatively, on the basis that we have taken a different approach to setting collars, the company states the maximum payment should be no greater than 1% of the return on regulatory equity. The collar should be no more than 120,000 to ensure that the ODI's financial impact is not disproportionate.</p>	<p>Change for the final determination.</p> <p>As we explain in the 'Delivering outcomes for customers policy appendix' we have changed the multiplier that we use to set the collar for sewer blockages performance commitments. The collar level on this performance commitment has changed as a result of the change in the multiplier.</p> <p>We discuss changes to the cap levels in Table 3 of this document.</p>	<p>We set underperformance collars to the following levels:</p> <p>2020-21 = 108,750 2021-22 = 108,750 2022-23 = 108,750 2023-24 = 108,750 2024-25 = 108,750</p> <p>Units: Number of sewer blockage events that required clearing.</p>

		Units: Number of sewer blockage events that required clearing.			
Renewable energy produced PR19TMS_EWS03	Caps, collars and deadbands	<p>Our intervention at draft determination was to set collar levels as follows:</p> <p>2020-21 = 453 2021-22 = 461 2022-23 = 468 2023-24 = 471 2024-25 = 475</p> <p>Units: Gigawatt hours.</p> <p>Our intervention at draft determination was to set cap levels as follows:</p> <p>2020-21 = 533 2021-22 = 542 2022-23 = 551 2023-24 = 554 2024-25 = 559</p> <p>Units: Gigawatt hours.</p>	<p>The company proposes to remove the cap and collar for this performance commitment.</p> <p>The company states that it is not a material performance commitment and that it does not need caps and collars as performance will be naturally limited by practical factors.</p> <p>The company states that it is something that customers want them to deliver for the environment and it is not something that should be restricted by a cap.</p> <p>In addition, the company states that the decision is not consistent with other decisions on caps and collars made in the price review, where we have intervened to reduce materiality to 1% of return on regulatory equity. The company states that the materiality of the performance commitment amounts to just 0.05% return on regulatory equity.</p>	<p>No change for the final determination.</p> <p>We are retaining the cap and collar that we set at draft determination. The P90 payment value is material and we consider that setting caps and collars provides stronger protection for customers. How we assess financially material and our standard approach to setting caps and collars is set out in the 'Delivering outcomes for customers policy appendix'</p>	N/A
Reducing risk of lead PR19TMS_BW10	Caps, collars and deadbands	No intervention at draft determination.	<p>The company proposes that the cap is removed for this performance commitment. It states that its P90 payment is only £0.8m and asks us to refer to its representation pro forma TW-DD-003, where the company states that 'the draft determination is not financeable' and presents several arguments and additional documents to support this view.</p> <p>In addition, the company states that customer preferences also mean that this cap and collar should be removed. The company states that 'Our customers preferred that performance for this commitment was not collared or capped as this might reduce our level of incentive. Most saw this as a priority, especially in schools and nurseries, and want to incentivise Thames</p>	<p>Change for the final determination.</p> <p>The company does not provide sufficient evidence that customers are willing to have an unlimited bill impact for lead pipes to be replaced over the next five years.</p> <p>We consider that an outperformance cap is required as the company has a high degree of control over activity and the financial implications are uncertain for customers as the volume that can be delivered has a degree of uncertainty. However, we have examined the proposed P90 that we use to set the cap with other companies and consider it is too pessimistic. We have calculated the ratios of the 2024-25 performance commitment levels and P90 performance levels for similar lead pipe replacement performance commitments across the sector. We consider that a more appropriate estimate of P90 performance that reflects</p>	<p>We set outperformance caps to the following levels:</p> <p>2020-21 = 16,150 2021-22 = 32,301 2022-23 = 48,451 2023-24 = 64,603 2024-25 = 80,755</p> <p>Units: Cumulative number.</p>

			Water to remove as much as possible. Almost all the customers surveyed want all lead pipes in Thames Water’s network to be replaced quickly, and when presented with the actual suggested bill increase, the vast majority are supportive of the plan.’	customers and the company’s ambition is if outperformance is 50% greater than the performance commitment.	
Unplanned Outage PR19TMS_BW02	Performance commitment level	<p>In the draft determination we set the performance commitment levels to the following values:</p> <p>2020-21 = 3.51 2021-22 = 3.22 2022-23 = 2.92 2023-24 = 2.63 2024-25 = 2.34</p> <p>Units: Percentage of peak week production capacity (%)</p>	<p>The company proposes performance commitment levels different to the draft determination, the levels are:</p> <p>2020-21 = 6.00 2021-22 = 5.75 2022-23 = 5.50 2023-24 = 5.25 2024-25 = 5.00</p> <p>Units: Percentage of peak week production capacity (%)</p> <p>This represents a large change in the performance commitment level for this measure from its current shadow reported value.</p> <p>The company states the measure is too immature to allow comparative assessment as the data is unreliable, there is substantial variation in the interpretation of the definition and the metric does not take into account company specific systems. The company includes a summary of a 2019 Shadow Reporting compliance assessment with the unplanned outage definition by sub-component for the industry and states that companies are largely non-compliant with the definition and therefore they will not be able to estimate the impact on projected numbers from the changes needed to become compliant. Therefore, setting a comparison-based performance commitment level is not robust.</p> <p>The company states that companies interpret or apply the methodology in different ways, compared with how it has interpreted it in its September 2018 and April 2019 business plans (for example by reporting against levels of demand instead of peak week production</p>	<p>Change for the final determination.</p> <p>We consider that a standard performance level in 2024-25 is appropriate for this measure. We consider this an appropriate approach for unplanned outage as it recognises the current maturity of the metric and the limited historical dataset in which to set stretching levels for. A standard level for 2024-25 is not suitable for any other asset health performance commitment as this would allow deterioration of performance for many companies, which is counter to our methodology requirement for companies to improve performance.</p> <p>All companies that forecast performance (2019-20 or actual 2018-19) better than 2.34% will be set performance commitments levels at 2.34% in all years. All companies that forecast performance (2019-20 or actual 2018-19) worse than 2.34% will be set profiles from their forecast 2019-20 value to 2.34%. The only exception to this is Southern Water which proposes worse performance commitment levels but a significant improvement from their current levels, therefore we have allowed Southern Water a different 2024-25 level.</p> <p>Please refer to the ‘Delivering outcomes for customers policy appendix’ for more detail on this sector wide change.</p> <p>The company’s 2018-19 shadow reported value of 18% is at odds with its 2020-21 forecast of 6% and the company does not provide its calculation or commentary on how its revised performance commitment level was determined; the company also does not provide its forecast for 2019-20. However, at the end of September 2019, the company submitted an action plan setting out actions in improving how it gathers, records and shares data on unplanned outages, which the company believes will enable it to be complaint with the reporting guidelines by April 2020. We welcome and accept the action plan and consider that it shows that the company will be compliant with the</p>	<p>We set the performance commitment levels to the following values:</p> <p>2020-21 = 6.00 2021-22 = 5.09 2022-23 = 4.17 2023-24 = 3.26 2024-25 = 2.34</p> <p>Units: Percentage of peak week production capacity (%)</p>

			<p>capacity). This inconsistency can only lead to a wide range of levels of unplanned outage, including some significant reductions between 2017-18 and 2018-19 and into the 2020-25 period. Therefore, it states that it is not appropriate to set the performance commitment level for the company at the median level when so much uncertainty persists in the interpretation and application of the methodology.</p> <p>It states that while at first it appears counter-intuitive, there is no evidence that a higher level of unplanned outages, as measured by this metric, would be a detriment to its customers. This is because the metric measures outage of all assets, regardless of whether there are redundancies that allow supply to continue without the asset. Therefore, companies with specific points of redundancy resilience are penalised by the metric. For example, it states that its London Ring Main enables it to operate at a comparatively high level of unplanned outage without there being a customer detriment. As such, there has not been the same need to invest in solutions that would reduce unplanned outages, as measured by this metric. It states that by incentivising it to change its operation to meet the draft determination's performance commitment level, we are effectively penalising it for its previous investments.</p>	<p>reporting requirements by 2020. We also note that all companies confirm they will be compliant with the guidance by 2020, therefore we do not consider there to be an issue with compliance.</p> <p>The company uses an example of its London ring main to illustrate that it enables it to operate at a comparatively high level of unplanned outage without impacting customers. However, the primary purpose of the performance commitment is to measure the health of the assets as a proxy for risk to service. The PR19 definition states: 'This measure is to be used as a means of assessing asset health (primarily for non-infrastructure – above ground assets), for water abstraction and water treatment activities'. If the number and duration of unplanned outages increases, the risk to service increases, regardless of the existing mitigations or redundancies in the company's system.</p> <p>On balance, the evidence the company provides is not sufficient or convincing to support its proposal and we can identify no other reason why we should make a change. We consider the median of 2.34% is achievable and set a reducing profile. We revise the reducing profile based on the starting figure of 6.00%, which the company proposes as an achievable 2020-21 starting value.</p> <p>We discuss our methodology for this performance commitment further in the 'Delivering outcomes for customers policy appendix'.</p>	
Unplanned Outage PR19TMS_BW02	ODI type	.In our draft determination we intervened to remove the outperformance payment.	<p>The company considers that given the uncertainty surrounding this metric, this metric should not be financially incentivised, but instead have a reputational incentive, with a performance commitment level of 5% unplanned outages.</p> <p>It proposes adding a new delivery incentive where it hands back the £77 million (at the end of the period) to its customers if it does not deliver the schemes associated with its plans to improve unplanned outages performance. These schemes are the upgrade to recirculation and run to waste at Coppermills water</p>	<p>No change for the final determination.</p> <p>The company proposes replacing the outcome based financial incentive (unplanned outages) with an output based financial incentive (delivery of schemes associated with improving unplanned outage). The basis of this argument is that there is uncertainty in the unplanned outage metric.</p> <p>Whilst we acknowledge that the measure is new for this price review, we do not accept that it is too uncertain to have financial incentives attached. All other companies have accepted financial incentives for this performance commitment, and the metric has been developed over time</p>	N/A

			<p>treatment works slow sand filtration (SSF) beds (£37.7 million), the upgrade to recirculation at Ashford Common water treatment works SSF beds (£35.9 million), and the upgrade to Hampton water treatment works Eastern slow sand filter beds (£3.5 million). The company is proposing the ODI on the condition that we accept its position that unplanned outages should be a non-financial incentive.</p>	<p>(and was included as a common performance commitment in our PR19 final methodology), including two years of shadow data. We have undertaken significant work with the sector, including Water UK, to develop the metric. We have requested and received fully audited 2018-19 data in May 2019, and raised a number of actions in our initial assessment of plans for companies to achieve definitional compliance. As a result of this we reported in our draft determination that only Thames Water planned to not be compliant by 2020.</p> <p>We note that we are allowing Thames Water enhancement funding to improve its performance on unplanned outages.</p> <p>More generally, in our draft determination we required all common asset health performance commitments to have underperformance payment incentive rates. We are maintaining this decision for final determinations as we consider that underperformance payments protect customers from poor performance in managing asset health appropriately. The delivery of the associated schemes is implicitly incentivised through the unplanned outage incentive.</p>	
<p>Unplanned outage PR19TMS_BW02</p>	<p>ODI rates</p>	<p>We intervened at draft determination to set the company's standard ODI underperformance rate at the upper bound of the reasonable range. We also introduced a two-tier ODI rate to recover enhancement allowances given to the company to improve its performance; these allowances are contingent on the company delivering the performance commitment levels its funding is granted for. The underperformance tier 1 ODI rate is -£8.891m and the underperformance tier 2 ODI rate is -£3.09m per %.</p>	<p>The company states that our proposed underperformance payment rate is disproportionate and does not align to customer preferences. It states that under its P10 underperformance scenario of 30%, which it claims is realistic and possible to operate at this level of outage without detriment to customers, it would incur an underperformance payment of £443 million.</p> <p>The company states that it disagrees with our two-tier approach to set an underperformance incentive rate that recovers enhancement expenditure should the company underperform against its performance commitment levels.</p> <p>The company sets out that the results of expenditure on outcomes is highly unreliable given high uncertainty around this measure. The company has included a stretch performance commitment level of 5% in its scenario as part of its draft determination response, and claims that the £77m will</p>	<p>Change for the final determination.</p> <p>Whilst the company is correct to state that underperformance payments in excess of £400m could be earned if it performed at 30%, we do not consider this a credible level of performance. We are also introducing a collar to limit the downside exposure in the event of very poor performance.</p> <p>We do not agree with the company's argument of perverse incentives. There are numerous examples in the price control where we are providing companies funding to deliver outcomes where there is some uncertainty as to the delivery, for example on leakage.</p> <p>Enhancement funding is granted on the basis that the company achieve a specific performance level, therefore we do not accept the company's argument that the uncertain outcome of the expenditure means that we should not be recovering the enhancement funding where it has not achieved the performance levels required. The company's performance commitment level of 5% is not the level it is being granted the funding to achieve and</p>	<p>We change the company's tier 1 ODI underperformance rate to recover cost allowances to -£2.719m/ percentage. The rate will apply between the company's performance commitment level each year and a performance level of 6%.</p>

			<p>contribute to, but not guarantee, performance at this level, and will not facilitate our draft determination levels of performance.</p> <p>The company states that it will create perverse incentives and that if there is a risk that the performance levels will not be reached, there would be an incentive not to spend the £77m on improving assets as otherwise the company may spend the money and still have to repay it to customers through the ODI.</p> <p>The company requests first that this performance commitment be made non-financial. It states that if it believes customer protection should still be provided concerning the enhancement allowance. However, this should be recovered from any failure to deliver the 5% commitment that it will contribute towards to avoid unintended consequences. Any stretch performance commitment level beyond 5% that we may impose should not attract an underperformance payment rate. The company proposes that we adopt its April submission underperformance rate.</p>	<p>therefore it is not appropriate that we do not recover funding beyond this point.</p> <p>We update the tier 1 final determination ODI underperformance rate for updated cost sharing allowances and performance commitment levels.</p> <p>See the 'Delivering outcomes for customers policy appendix' for more information on how we have calculated ODI rates and associated thresholds for common performance commitments with cost-recovery.</p>	
<p>Acceptability of water to customers</p> <p>PR19TMS_BW08</p>	<p>ODI rates</p>	<p>We intervened at draft determination to set the underperformance to -£8.353m per contact per 1,000 population.</p>	<p>The company states that it is already a high performer in this area. It also states its proposed ODI underperformance rate is based on extensive customer research which shows that customers attach a low marginal benefit (per contact issue) to further improvements</p> <p>The company states that the draft determination rate imposes an unreasonable underperformance payment, orders of magnitude worse than it had expected.</p> <p>The company proposes to change its underperformance ODI rate to the rate set out in its April business plan submission (-£0.273 per Number of consumer contacts received per 1,000 population per calendar year)</p>	<p>Change for the final determination.</p> <p>When deriving its proposed ODI underperformance rate, the company has adopted an appropriate approach to triangulation for the calculation of this ODI rate. It makes a number of inappropriate adjustments to the triangulated marginal benefit value in deriving its incentive rates. The company uses a marginal benefit estimate of willingness to pay per person rather than per contact and in doing so implicitly assumes that every occupant of a property effected by an incident will contact the company. Secondly the company makes the assumption that the willingness to pay values derived from its Stated Preference research refer to water quality events that occur persistently throughout the year. The company then scales down the values by 3/365 to account for one-off or operational water quality events. This assumption is contrary to the description of the service failure presented to customers in its PR19 Mains Stage Stated Preference research, which does not imply that the service failure will occur on every day of the year and suggests the service failure may be</p>	<p>We change the company's underperformance ODI rate to -£1.975m per contact per 1,000 population.</p>

				<p>resolved "in a few hours". The company does not provide sufficient evidence to justify these assumptions. The combined impact of these adjustments results in a lower marginal benefit value and associated ODI rate than implied by the output of the companies' valuation research.</p> <p>The company does not provide sufficient evidence to change our draft determination view that the company's underperformance rate is still inappropriate due to its un-evidenced adjustments in its triangulation. However, we note that the rates implied by the company's research are significantly higher than the company's proposed rates and are high compared to the wider industry. Given our concerns we are setting the company's rate using the reasonable range. We use reasonable ranges as companies' proposed ODI rates vary considerable, in ways we are unable to correlate to plausible drivers of underlying customer preferences. To mitigate the risk of methodological differences leading to ODI rates which depart significantly from underlying customer preferences, we use reasonable ranges as a data point setting ODI rates, on the premise that a range based around the sector average will reduce the influence of the unexplained variance. We therefore set the underperformance rate at the lower bound of the industry reasonable range. Our approach to reasonable ranges is explained more fully in the 'Delivering outcomes for customers policy appendix'.</p>	
<p>Clearance of blockages</p> <p>PR19TMS_CS04</p>	ODI rates	<p>In our draft determination we intervened to change the company's underperformance rate to -£0.0035m per blockage due to the company having poor comparative performance.</p>	<p>The company states that its rate reflects its customers' valuations. It claims its extensive customer research shows that customers want it to prioritise reducing internal sewer flooding and pollutions and are less concerned by blockages (they identify with the service impacts they experience, for example the resulting flooding, rather than a blockage itself).</p> <p>Its comparative performance is not an outlier when normalised for population (as opposed to normalisation on sewer length). It claims that industry analysis shows that normalising for resident population has a much stronger correlation with blockages (0.9 vs 0.75 for sewer length) and makes sense from an engineering perspective, as blockages are caused by what people put into the sewer network. It also claims London has a much</p>	<p>Change for the final determination.</p> <p>The company's proposed rate is within our reasonable range. We intervened in the draft determination because the company failed both our past performance and our comparative stretch tests as set out in our 'PR19 draft determinations: Delivering outcomes for customers policy appendix'. The company claims that we should normalise by population, not sewer length. We agree that connected properties is a better metric than sewer length for normalisation of this measure and so are making this change for our final determination.</p> <p>However, the result of this change is that Thames Water continues to be a relatively poor performer. The company presents no evidence of the impact of a higher density of food outlets, and we note that several other companies also have large urban areas within their supply zones. As such, it fails the same test it failed in our draft</p>	<p>We change the underperformance payment rate to -£0.001403m per blockage.</p>

			<p>higher density of food outlets which also affect blockages. The company also notes that the two worst performers (Yorkshire Water and Dŵr Cymru) did not include this as a bespoke metric and considers it is being punished for doing so.</p> <p>There are interactions between blockages, internal sewer flooding and pollutions such that the intervention results in inappropriate incentives. Combined with the level of the collar, the maximum underperformance payment for blockages is significantly higher than for internal sewer flooding.</p> <p>The company requests that we reinstate its April submission underperformance rate of -£0.001008m, which it states is consistent with its customer research.</p>	<p>determination assessment and we retain our view that our intervention to increase the underperformance rate to the average was appropriate. However, we have assessed whether mean or median should be used.</p> <p>We receive representations from several companies stating that the median and interquartile range is a more appropriate basis on which to construct the ODI reasonable range. We use the reasonable range to benchmark companies' proposed ODI rates and as a data input for setting a revised rate where a change to the company proposal is necessary. We consider this carefully for all performance commitments where we use the reasonable range as part of our testing. As a consequence we move to a reasonable range defined by the median and interquartile range for this performance commitment. For further details on our assessment of how we construct the reasonable range see our 'PR19 final determinations: Delivering outcomes for customers policy'.</p> <p>The company states that we have placed undue incentives on sewer blockages, which is not a customer priority. Sewer blockages is an important measure of asset health and so we consider that it needs to be appropriately incentivised. Our view of the 2020-25 P10 financial position at draft determination is that sewer blockages is similar to both mains repair and internal sewer flooding. This does not place undue emphasis on sewer blockages compared to the other measures customers consider to be important.</p>	
<p>Installing new meters in London PR19TMS_M01</p> <p>Replacing smart meters in London PR19TMS_M02</p>	<p>Performance commitment level and ODI rates</p>	<p>In our draft determination we intervened to set a performance commitment with the following characteristics:</p> <p>Set the performance commitment to measure the total number of smart meters installed annually at properties that either previously paid unmetered charges or the installation of small bulk meters that provide additional benefit to meters already installed.</p>	<p>The company notes that we have set two new performance commitments for smart meters in London namely 1) Installing new smart meters in London and 2) Replacing existing meters with smart meters in London. The company states that we have considered that the metering cost adjustment case is isolated from its other ODIs and therefore we have adopted cost-recovery performance commitments to protect customers from non-delivery.</p> <p>However, the company states that these additional performance commitments duplicate underperformance payments with its leakage and per capita consumption performance commitments. The company states that it is</p>	<p>Change for the final determination.</p> <p>We consider that although the company already has some incentives to deliver the scheme, for example the leakage and per capita consumption performance commitments, we consider there to be additional and long-term benefits to the smart metering programme which warrant it being directly incentivised. We are therefore retaining this performance commitment.</p> <p>Further, this is a cost recovery performance commitment which ensures that customers can recover the costs if the programme is not fully delivered. Leakage and per capita consumption instead aim at providing the right incentives</p>	<p>We change the performance commitment level to the following:</p> <p>2020-21 = 80,000 2021-22 = 160,000 2022-23 = 240,000 2023-24 = 320,000 2024-25 = 399,749</p> <p>Units: Number of smart meters.</p> <p>We change the underperformance payment rate to -£0.000037m/meter for installing new meters.</p>

		<p>Set the performance commitment level in each year to the following: 2020-21: 90,000</p> <p>2021-22: 180,000 2022-23: 270,000 2023-24: 360,000 2024-25: 455,168</p> <p>Units are cumulative number of smart meters installed. Set an underperformance only outcome delivery incentive. The unit rate is set to -£0.000027. The rate is based on our totex allowance multiplied by a cost sharing factor of 50% per unit. The underperformance payment will only apply in the final year of the period in order to return unspent cost allowance to customers.</p> <p>The outcome delivery incentive is end-of-period and has no collar.</p>	<p>relying on its metering program to achieve its performance commitment levels for its leakage and per capita consumption, and have used the costs of this program to develop the marginal costs for the related ODIs. Specifically, the company states it has split the incremental metering cost and benefit between its leakage and per capita consumption ODIs. The company considers that customers are already protected if it does not achieve its performance commitment levels.</p> <p>In addition, the company notes that performance commitment levels selected by us do not match the performance commitment definitions outlined in its Thames Water outcomes performance commitment appendix. The company states that we have specified we seek to measure the impact of the company's metering program on residential customers in London, but we have included counts of meters outside of the London water resource zone (WRZ) and meters for non-household customers.</p> <p>Therefore, the company requests to remove the two smart metering performance commitments because these duplicate the costs associated with our cost adjustment case with the marginal costs for our leakage and per capita consumption performance commitments.</p>	<p>for companies to reduce leakage and per capita consumption.</p> <p>In other words, the performance commitments are complements, not substitutes. If the company underperforms on metering then we would expect it to explore additional ways of reducing per capita consumption, such that an additional underperformance incentive for per capita consumption is also justified for customer protection and to incentivise performance.</p> <p>The company provides sufficient and convincing evidence that the number of new meters installed under the scheme should be updated to 399,749 (instead of 455,168).</p> <p>In our final determinations we allow a cost allowance of £45.53m for installing new meters and £7.39m for replacing existing meters. Therefore, the updated underperformance ODI rates (using updated cost sharing ratios) are respectively £0.000048m and £0.000024m per meter.</p>	<p>We change the underperformance payment rate to -£0.000018m/meter for the replacement of meters.</p>
<p>Sewage pumping station availability PR19TMS_CS05</p> <p>Surface water management PR19TMS_DS02</p>	<p>Removal of performance commitments</p>	<p>At draft determinations we removed outperformance payments for sewage pumping station availability.</p> <p>We also imposed annual performance commitment levels (see individual representation below) for surface water management as the company had only proposed an overall performance commitment level by 31 March 2025, although</p>	<p>The company sets out that our draft determination requires a step-change in performance more ambitious than any five-year plan that has ever been delivered in the English and Welsh water sector to date and that this cannot be delivered with the cost allowances included at the draft determination. It has proposed a lower cost, lower investment scenario that includes removing 'slow burn' sustainable and environmental improvements and consequently considers that it cannot deliver four bespoke performance commitments:</p> <ul style="list-style-type: none"> - Sewage pumping station availability 	<p>No change for the final determination.</p> <p>In advance of our draft determination the company provided sufficient and convincing evidence that all four performance commitments were required to protect customers and provide appropriate incentives for the company.</p> <p>We set price limits that allow efficient companies to finance their functions. We consider that the activities set out in the four performance commitments are all within the scope of what water companies need to deliver to fulfil their functions. The price limits we set in final determinations, after considering stakeholder representations, provide sufficient cost allowances for an efficient company to</p>	<p>N/A</p>

<p>Responding to major Trunk mains bursts</p> <p>PR19TMS_BW11</p> <p>Water Quality Events</p> <p>PR19TMS_BW09</p>		<p>there is only a financial incentive on overall delivery.</p> <p>We did not intervene at draft determination in any other aspect of these performance commitments.</p>	<ul style="list-style-type: none"> - Surface water management - Responding to Trunk mains bursts - Water Quality Events <p>It states it will seek to deliver against these measures where it can and it may consider performance commitments in the 2025-30 regulatory period. The company also states that acceptance of the other performance commitment levels is dependent on these measures being removed.</p>	<p>deliver these performance commitments, together with all common and comparative bespoke performance commitments.</p> <p>In addition surface water management was a 2015-20 performance commitment and in line with our PR19 methodology approach 2015-20 performance commitments should continue in the 2020-25 period unless there are specific convincing reasons why it should not.</p> <p>The company provides no new evidence to contradict its previously submitted evidence. It does not explain why its evidence, including the evidence it provided on customers views, in its September 2018 business plans and April 2019 business plans is no longer valid. We have reviewed the evidence provided by the company in September 2018 and April 2019 and concluded that performance commitments from the company in these areas are in the best interests of customers.</p> <p>We consider that the company provides insufficient and unconvincing evidence to remove the four bespoke performance commitments mentioned. In particular we consider that the evidence the company provided to date to include these performance commitments is sufficient and convincing and the arguments on cost do not change this.</p>	
<p>Sludge treated before disposal</p> <p>PR19TMS_ES03</p>	<p>Performance commitment definition</p>	<p>Our intervention at draft determination stage was to amend the definition to use common language in expressing its commitments.</p>	<p>The company proposes that the exclusion element of the performance commitment should be redrafted from: 'Sludge exported out of the company's region is excluded if it is treated before disposal.'</p> <p>To:</p> <p>'Untreated sludge exported to third parties for treatment is excluded'.</p> <p>The company states that we should exclude sludge sent to third parties in the metric as they do not have control of 3rd party processes and only utilise their services if it is more beneficial than treating it themselves.</p>	<p>No change for the final determination.</p> <p>The purpose of this commitment is to improve the percentage of sludge that is treated before disposal. This reduces the environmental impact through fewer vehicles leaving sludge centres and increased energy recovery from sludge. We also consider that increased untreated sludge exported out of the region could lead to increased environmental impacts, due to more vehicles travelling further and the lack of guarantees that the sludge will be treated. For this reason it is appropriate that an exclusion should remain so that sludge exports and imports count towards the metric.</p> <p>It is also important that the company retains responsibility for effectually dealing with the contents of its sewers. It should not avoid responsibility for untreated sludge by simply exporting it out of the region. The company provides insufficient justification for how it would discharge</p>	<p>N/A</p>

				<p>its responsibility and therefore it appears appropriate that this exclusion should remain to incentivise the company to ensure its sludge is treated before disposal.</p> <p>We consider that the company can exercise control on how its sludge is processed through contracts.</p> <p>We consider the company does not provide sufficient and convincing evidence to revert to the exclusion submitted in its September 2018 business plan.</p>	
<p>Empty business properties</p> <p>PR19TMS_EWS08</p>	<p>Performance commitment definition</p>	<p>No intervention at draft determination.</p>	<p>The company states that the units specified for the performance commitment should be 'number', not 'properties'. Otherwise other performance commitments should be updated, i.e. Properties at risk of receiving low pressure should be changed from 'number' to 'properties'.</p>	<p>Change for the final determination.</p> <p>There is sufficient and convincing evidence that this is consistent with our approach to other performance commitments, such as properties at risk of receiving low pressure. We note that this is a presentational issue and the measurement is clear from elsewhere in the definition.</p>	<p>We revise the definition of the performance commitment by replacing 'properties' with 'number'.</p>
<p>Surface water management</p> <p>PR19TMS_DS02</p>	<p>Performance commitment definition</p>	<p>No intervention at draft determination.</p>	<p>The company states that units specified for the performance commitment should be 'number', not 'hectares'. Otherwise other performance commitments should be updated, i.e. Properties at risk of receiving low pressure should be changed from 'number' to 'properties'.</p>	<p>Change for the final determination.</p> <p>There is sufficient and convincing evidence that this is consistent with our approach to other performance commitments, such as properties at risk of receiving low pressure. We note that this is a presentational issue and the measurement is clear from elsewhere in the definition.</p>	<p>We revise the definition of the performance commitment by replacing the units 'hectares' with 'number'.</p>
<p>Effective stakeholder engagement</p> <p>PR19TMS_ET02</p>	<p>Performance commitment definition.</p>	<p>No intervention at draft determination.</p>	<p>The company states that 'Measurement unit and decimal places' and 'unit' should be changed to 'score' instead of 'number'. The company states that this would be consistent with the security of supply index performance commitment.</p>	<p>Change for the final determination.</p> <p>There is sufficient and convincing evidence that this is consistent with our approach to other performance commitments, such as the security of supply index. We note that this is a presentational issue and the measurement is clear from elsewhere in the definition.</p>	<p>We revise the definition of the performance commitment by replacing the units 'number' with 'score'.</p>
<p>BSI for fair, flexible inclusive services</p> <p>PR19TMS_AR07</p>	<p>Performance commitment definition</p>	<p>No intervention at draft determination.</p>	<p>The company states that the performance commitment level as set out in the draft determination is too stretching and not in line with other companies, including fast track. It proposes that it achieves the standard in 2020-21, and maintains it through the rest of the period.</p>	<p>Change for the final determination.</p> <p>Following our initial assessment of business plans, the company proposed that it achieved the standard for the water service in 2020-21, and wastewater in 2021-22, and maintains for the rest of the period. There was an error in the draft determination which states that the standard should be maintained for each year of the period, which implies that it should be achieved before the start of the period. This was not the intention.</p>	<p>We revise the performance commitment to require the company to achieve the standards for both services in 2020-21, and maintain this performance for the rest of the period.</p>

				The company provides sufficient and convincing evidence that it should achieve the standard for both services in 2020-21, and maintain for the rest of the period.	
<p>Percentage of satisfied vulnerable customers</p> <p>PR19TMS_AR05</p>	<p>Removal of performance commitment and performance commitment level</p>	<p>We introduced the performance commitment at draft determination.</p>	<p>The company had initially included this performance commitment in its business plan, but removed it following our initial assessment of business plans, when we raised an action to include a performance commitment for the attainment of the British Standard Institution 18477.</p> <p>The company considers that this leads to too many performance commitments focused on vulnerable customers, and that this is disproportionate. It also sets out in more detail what is required from companies in terms of gaining feedback from customers to gain British Standard Institution accreditation. The company also questions the performance commitment level, stating it is not clear how it was reached, and the 'flat target' rather than a 'glide path to improvement'.</p>	<p>No change for final determination.</p> <p>The company includes sections of the British Standard Institution standard in its representation that sets out how the company is required to undertake customer research and then respond appropriately. But there is no compulsion to publish this information, and so it is much less transparent than a performance commitment and therefore more difficult for us to hold the company to account. We consider that this is not in customers' best interests.</p> <p>The company states that the number of performance commitments around vulnerability is disproportionate, however we do not consider that three vulnerability performance commitments is disproportionate or inconsistent with other companies.</p> <p>We note that the company has not set a more stretching performance commitment level for the common priority services register performance commitment i.e. it has adopted the minimum level of 7%. We therefore do not consider that it has demonstrated a high level of ambition in relation to vulnerable customers, which would mean that having three performance commitments could be considered that a disproportionate level of effort was required from the company.</p> <p>We consider that retaining the performance commitment is in customers' interests because otherwise the company will not have a regular, customer-centric measure of whether it can make its priority services register services better. It also provides transparency for customers in an area where the company has performed poorly in the past (during the 2018 Freeze/Thaw event), and will allow them to better able to hold the company to account as a result.</p> <p>In response to the company's representation on performance commitment levels and lack of glide path, the company is correct that we used the business plan data line 'customers are satisfied that services are easy to access' as a basis for the performance commitment level, as although not identical, it is similar to the performance</p>	<p>N/A</p>

				<p>commitment. The company does not put forward an alternative on which to base the performance commitment level, and it does not indicate whether it believes it is too high or low. We therefore propose to retain the performance commitment level as at draft determination. The company raises the point that the performance commitment levels do not have a glide path as it states other companies do, however there are a number of other companies with no glide path for very similar or the same performance commitments.</p> <p>In response to the company's representation on performance commitment levels and lack of glide path, the company is correct that we used the business plan data line 'customers are satisfied that services are easy to access' as a basis for the performance commitment level, as although not identical, is similar to the performance commitment. The company does not put forward an alternative on which to base the performance commitment level, and it does not indicate whether it believes it is too high or low. We therefore propose to retain the performance commitment level as at draft determination. The company raises that the performance commitment levels do not have a glide path as it states other companies do, however there are a number of other companies with no glide path for very similar or the same performance commitments.</p> <p>We consider that the company does not provide sufficient and convincing evidence to remove the performance commitment, or for changing the performance commitment levels.</p>	
<p>SEMD - Securing our sites (2020-25 projects)</p> <p>PR19TMS_DWS02</p> <p>&</p> <p>SEMD - Securing our sites (legacy projects)</p> <p>PR19TMS_DWS03</p>	<p>Performance commitment definition</p>	<p>For Security and Emergency Measures Direction (SEMD) - Securing our sites (2020-25 projects): The intervention we made at draft determination was to align the definition of this performance commitment with our cost allowance for 28 sites in the 2020-25 period. We renamed this performance commitment so that it can be distinguished from the performance commitment we included for legacy projects</p>	<p>The company states that our basis for including a new performance commitment for uncompleted 2015-20 'legacy sites' is misplaced, and it should be removed. It proposes all Security and Emergency Measures Direction schemes delivered in 2020-25 should be considered under the original performance commitment that it proposed.</p> <p>The company's key considerations are:</p> <ul style="list-style-type: none"> The performance commitment for the 2015-20 period was not to deliver 591 outputs but to deliver 100% of the SEMD advice notes. 	<p>Change for the final determination.</p> <p>We set overall cost thresholds for companies to finance their functions. For the 2015-20 period, the company set out that it needed to deliver 591 outputs to meet obligations it has under SEMD. We consider our cost thresholds for the 2015-20 period provided sufficient expenditure for an efficient company to deliver its functions, including delivering these 591 outputs.</p> <p>In order to hold the company to account we consider it necessary to have a separate performance commitment to incentivise the company to deliver the remaining 264 outputs from the original outputs, as these are all still</p>	<p>We update the definitions to reflect the revised delivery profile and summarise the improvements expected under each performance commitment to increase transparency.</p> <p>We change the legacy profile from 100% in each year to match the new profile provided by the company. We set the 28 schemes covered by the 2020-25 performance commitment to be profiled evenly over the last four years of the period.</p>

		<p>that the company has not completed in the 2015-20 period.</p> <p>For Security and Emergency Measures Direction - Securing our sites (legacy projects): The intervention we made at draft determination was to add a performance commitment with a service level of 100.0% delivery each year as these projects should already be delivered.</p>	<p>The programme to deliver this, in terms of outputs, is variable over time through an iterative process of discussion with DEFRA. It contends that while at the time of planning for the 2015-20 period there were 591 potential outputs, the scope of work on these outputs, and hence cost, has changed significantly. It has proposed to Defra a revised set of 326 outputs in October 2018 for 2015-20.</p> <ul style="list-style-type: none"> • It considers its 2010-15 SEMD programme totex is 'ring-fenced', with any under-spend due to efficiency or delay required to be used toward additional SEMD activities. • It now expects that the 326 outputs will 'fully utilise all the PR14 funding', • The company states it undertook a high level assessment in the 2015-20 period and did not understand the scope of the works required. It states 'we recognise that we didn't have enough knowledge or understanding of the scope required or the cost of delivery.' • The company identifies numerous operational and governance issues within its business that contributed to the non-delivery of the performance commitment, such as 'we did not retain enough control over or direct engagement with our Alliance partners contracted to deliver our SEMD programme of work.' It sets out a number of ways it is improving. • The company considers the remaining 264 outputs should be considered afresh in 2020-25 and has set out detailed costs for the delivery of all delayed 2015-20 outputs, as well as an additional 28 outputs. (Note: two of the original 2015-20 period outputs have been merged into one.) <p>The company also considers that the delivery profile should be based on actual deliverables and that basing it on Totex is not appropriate as the type and nature of work should be accounted for. It also proposes that the definition of the sole performance commitment is amended to include the statement, 'We will</p>	<p>expected to be delivered. (Two outputs have now been combined, so the total number is 590, but we understand the scope to deliver these remains the same.)</p> <p>We respond to the companies points in more detail in the 'Thames Water – SEMD performance commitments additional information appendix'.</p> <p>The company sets out that all 28 boreholes, that are the only new schemes, will be delivered in the final year. It does not provide sufficient or convincing reasons for this profile and we consider that delivery should be over the period to ensure that the company delivers. Taking account of the need for design, planning and installation we propose that no schemes are required in the first year, but the performance commitment level is for the delivery of 7 schemes (25%) in each of the last four years of the period.</p>	
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			be flexible regarding changes to the SEMD programme that may arise within the delivery period and will continue to work closely with Defra. Any changes will be agreed with Defra.'		
<p>SEMD - Securing our sites (2020-25 projects)</p> <p>PR19TMS_DWS02</p> <p>&</p> <p>SEMD - Securing our sites (legacy projects)</p> <p>PR19TMS_DWS03</p>	ODI rates	<p>For Security and Emergency Measures Direction - Securing our sites (2020-25 projects): The intervention we made at draft determination was to make the underperformance payment apply only for expected performance in 2024-25.</p> <p>The element that relates to the foregone benefit to customers is £0.0403m per percentage of the programme.</p> <p>In addition, we stated that at PR24 we will recover allowed costs for any underperformance at a rate of £0.100m per unit of non-delivery in 2024-25.</p> <p>For Security and Emergency Measures Direction - Securing our sites (legacy projects): The intervention we made at draft determination was to add a performance commitment with:</p> <ul style="list-style-type: none"> • An underperformance only outcome delivery incentive. • A unit rate of -£0.381m per percentage of the 2015-20 programme not delivered by 31 March 2025 to reflect the detriment to customers of five years of delayed delivery by 2024-25. • The outcome delivery incentive applies in 2024- 	<p>The company states that the proposed underperformance rate should be updated to reflect the full 2020-25 programme and calculated based on the WACC and run-off attributable to the programme totex, which results in an underperformance rate of -£0.078m.</p> <p>It does not consider it appropriate to return totex to customers. This is because it considers its Security and Emergency Measures Direction programme totex is 'ring-fenced', with any under-spend due to efficiency or delay required to be used toward additional Security and Emergency Measures Direction activities.</p> <p>If the performance commitment for our 2015-20 programme is retained for any of the 326 outputs not delivered, it proposes that the underperformance rate applied is consistent with the underperformance rate that was agreed for 2015-20. When Water and Wastewater are combined this results in an overall underperformance rate of -£0.078, based on the original underperformance rates of -£0.093 million and -£0.037 per percentage delay for Water and Waste respectively. These rates are calculated based on 2018-19 Thames Water ODI calculator.</p>	<p>Change for the final determination.</p> <p>We do not consider that any expenditure is ring fenced and we do not set cost allowances for 2020-25 on this basis. To protect customers it is important if a company does not deliver that we recover associated expenditure, which will help to provide transparency and avoid customers paying twice for the same improvement.</p> <p>We calculate our delay and recovery ODIs for 2020-25 Security and Emergency Measures Direction performance commitment in the standard way set out in our 'Delivering outcomes for customers policy appendix'.</p> <p>We take the legacy SEMD costs from the 2015-20 period business plan tables WS2 and WWS2 of £23.255m for water and £71.348m for wastewater. We calculate our delay and recovery ODIs for the legacy Security and Emergency Measures Direction performance commitment in the standard way set out in our 'Delivering outcomes for customers policy appendix'.</p> <p>In reviewing the calculations we note that the costs were in 2012-13 prices. We therefore inflate these to 2017-18 prices using RPI (the measure in place when the costs were estimated). The original total costs in 2012-13 prices were £94.603m, while the new costs uplifted to 2017-18 prices are £106.236m. We then calculate delay and recovery ODIs in the standard way.</p> <p>We update the definition to make clear that the delay underperformance payments should apply for each year in the 2020-25 period.</p>	<p>We update the definition to make clear that the delay underperformance payments should apply for each year in the 2020-25 period.</p> <p>SEMD - Securing our sites (2020-25 projects)</p> <p>Delay ODI rate: -£0.0110m</p> <p>Recovery ODI rate: -£0.0513m</p> <p>SEMD - Securing our sites (legacy projects)</p> <p>Delay ODI rate: -£0.0805m</p> <p>Recovery ODI rate: -£0.3741m</p>

		25 only, is end-of-period and has no underperformance collar.			
Power Resilience PR19TMS_DWS01	ODI rates	Our intervention at draft determination was to remove outperformance payments for this performance commitment. We also intervened to amend the underperformance rate to -£0.321m per undelivered scheme by 2024-25.	The company states in its pro-forma that this is not a representation and it provides no new evidence. The company requests that we reinstate its underperformance payment rate for the final determination – that is underperformance payment rate of -£0.143 million per site. The company states that the incentive rates included in its April 2019 resubmitted business plan reflect extensive customer research.	Change to the final determination. At draft determination we allowed the company's enhancement cost claim to improve the resilience of 47 sites. We consider that given we are allowing the company's enhancement cost claim, there is a need to protect customers from non-delivery of these resilience schemes through underperformance payments. The company does not provide sufficient evidence of why this customer protection is not required. We continue to consider that the underperformance payments for this measure should at least return the costs for schemes not delivered that are not returned through cost sharing. We update the ODI rate to take account of the final determination cost allowance and totex sharing rates.	We update the ODI rate that is based on cost recovery to -£0.2371 million per site
Improving system resilience of North East London water supply performance commitment PR19TMS_BW12	Performance commitment	The intervention we made at draft determination was to change the definition to ensure that there is sufficient clarity regarding the performance commitment levels for the 2020-25 period. We also intervened to change the definition further to clarify that the design of the high lift pumping station design and local configuration should be completed within the first two years of the period.	The company does not make a representation to remove this performance commitment. The company provides additional information to support its enhancement claim. In light of this additional information, we have changed our position and no longer consider a performance commitment as the most effective method of ensuring delivery.	Change for the final determination. We consider the additional information the company provides and have changed our position regarding how it should be delivered. We recommend to remove the performance commitment that we applied at draft determination as it is no longer necessary. Delivery will now be achieved through a separate gated mechanism and therefore a performance commitment to provide additional customer protection in the event of non-delivery is no longer required.	We remove the performance commitment that we applied at draft determination as it is no longer necessary.
Environmental measures delivered PR19TMS_ES02	Performance commitment definition Performance commitment levels	We intervened at draft determination to ensure there is no need to adjust the performance commitment over time by defining the scope of the performance commitment to only cover activity classified by the Environment Agency as	The company states that underperformance payments should not apply where the Environment Agency agrees that the delay was caused by factors outside of the company's control. It provides several arguments for exclusions arguing that this amendment to the definition is appropriate. These include where the Environment Agency swaps schemes,	Change for the final determination. The company does not provide sufficient evidence to demonstrate that its proposals provide better incentives for it to deliver environmental benefits or outweigh the benefits of having stable performance commitments	We change the performance commitment levels on this performance commitment to align with the company's proposed profile in its query response. These are as follows: 2020-21 = 180 2021-22 = 446 2022-23 = 534

		<p>'green' Water Industry National Environmental Programme water and wastewater schemes</p>	<p>determines that schemes are no longer required, or stipulates a later regulatory delivery date.</p> <p>The company proposes that for the final determination, we amend the definition of the metric, so that the annual performance commitment levels can be updated to reflect agreed changes with the Environment Agency.</p> <p>We sent a query to the company to ensure the delivery profile we were setting aligned with the company's view of its WINEP obligations. In response to a query from us the company provides a revised profile in line with the 'green' certainty schemes listed in the 11 June WINEP.</p> <p>The company also provides a revised price control allocation based on its September 2019 submission.</p>	<p>We consider that there are a number of disadvantages of changing performance commitments. It leads to a disconnect between the cost/service package specified at the start of the period and that which is delivered. Costs will remain fixed and so should the service package. Changing performance commitment levels during the period may lead to a company focusing on convincing regulators as opposed to focusing on delivering what matters to customers. It adds complexity, which is likely to reduce the impact of incentives and reduce transparency as well as adding cost to both companies and regulators.</p> <p>The company provides sufficient evidence in its response to our query, we therefore change the delivery profile to align with its proposed performance commitment levels in its response to our query.</p>	<p>2023-24 = 595 2024-25 = 757</p> <p>Units: Number of schemes</p> <p>We change the price control allocation to:</p> <p>86.92% wastewater network plus 2.44 water network plus 10.64% water resources</p>
<p>Priority services for customers in vulnerable circumstances</p> <p>PR19TMS_AR06</p>	<p>Performance commitment levels</p>	<p>We intervened at draft determination to change the definition of the performance commitment by splitting the measure into 'attempted' (i.e. an outbound contact that has not received a response) and 'actual' contacts (i.e. updates to data based on contact with the customer).</p>	<p>The company states that it has concerns about the achievability of the 50% response rate for the actual contact element of the performance commitment. The company adds that it has been working with the energy sector and has learnt from its experience of growing and maintaining the priority services register.</p> <p>The company proposes 30% as a stretching target.</p>	<p>Change for the final determination.</p> <p>Given this performance commitment places specific emphasis on companies to check data, it is reasonable to expect success rates that are greater than what has been achieved so far.</p> <p>The company, along with representations from other companies of a similar nature, provides evidence from experience in the energy sector that improves our understanding of likely success rates. We consider that this is convincing evidence and have revised the performance commitment levels.</p>	<p>We change the actual contacts element of the performance commitment levels as follows:</p> <p>2020-21 = 17.5 2021-22 = 35 2022-23 = 35 2023-24 = 35 2024-25 = 35</p> <p>Unit: Percentage of priority services customers that the company has made actual contact with</p>
<p>Performance commitments relating to the Thames Tideway Tunnel project</p> <p>PR19TMS_ET01 PR19TMS_ET02 PR19TMS_ET04 PR19TMS_ET05 PR19TMS_ET06</p>	<p>Performance commitments and ODIs</p>	<p>We intervened on the company's bespoke performance commitments ET01, ET02 and ET04. We removed ET03 and set new performance commitments ET05 and ET06.</p>	<p>The company provides detailed feedback and proposals relating to all project-related performance commitments.</p>	<p>Change for the final determination.</p> <p>We set out our assessment, reasons and decisions for these performance commitments in 'Thames Water – Thames Tideway Tunnel performance commitments additional information appendix'.</p>	<p>We set out our assessment, reasons and decisions for these performance commitments 'Thames Water – Thames Tideway Tunnel performance commitments additional information appendix'. We make a number of amendments to the performance commitments and add an additional performance commitment – ET07.</p>

PR19TMS_ET07					
C-MeX PR19TMS_AR01	All	We set a common performance commitment for all companies regarding residential customer satisfaction.	All representations from companies and other stakeholders are summarised and assessed in the 'Customer measure of experience (C-MeX) and developer services measure of experience (D-MeX) policy appendix'.	All representations from companies and other stakeholders are summarised and assessed in the 'Customer measure of experience (C-MeX) and developer services measure of experience (D-MeX) policy appendix'.	See 'Customer measure of experience (C-MeX) and developer services measure of experience (D-MeX) policy appendix'.
D-MeX PR19TMS_AR05	All	We set a common performance commitment for all companies regarding developer services customer satisfaction.	All representations from companies and other stakeholders are summarised and assessed in the 'Customer measure of experience (C-MeX) and developer services measure of experience (D-MeX) policy appendix'.	All representations from companies and other stakeholders are summarised and assessed in the 'Customer measure of experience (C-MeX) and developer services measure of experience (D-MeX) policy appendix'.	See 'Customer measure of experience (C-MeX) and developer services measure of experience (D-MeX) policy appendix'.

Table 2: Thames Water - Representations from other stakeholders

Stakeholder	Performance commitment	Type	Our intervention for the draft determination	Summary of company representation	Our assessment and rationale for the final determination decision	Decisions for the final determination
CCWater	Various performance commitments	Performance commitment levels	N/A	CCWater notes that they welcome 'Ofwat's more stretching performance commitments for Per Capita Consumption, water supply interruptions, internal sewer flooding and blockages', although the council noted concerns on the deliverability of the outcomes, and the impact this could have on customers if the company did not meet their performance commitment levels.	No change for the final determination. We welcome the view of CCWater.	N/A
Thames Water Customer Challenge Group (CCG)	Customer priorities of all performance commitments	Performance commitment levels	N/A	The Thames Water Customer Challenge Group reiterates what customers want in terms of 'predictable, reliable (and where possible) improving service, investment in key infrastructure, delivering future resilience, ensuring that challenges such as population and climate change could be effectively addressed, good support for vulnerable customers and thoughtful and effective stewardship of the environment.' However, the Customer Challenge Group notes how the company had been clear that the draft determination as it stands would see it fail on these priorities, and the Challenge Group states how Thames Water's own 'lower cost, lower investment' scenario sees it focus on now instead of the future.	No change for the final determination. We acknowledge the customer priorities raised by the Thames Water Customer Challenge Group and how the company has stated it will fail these priorities within its 'lower cost, lower investment' scenario. We have considered the outcomes of the company's customer engagement for all of the company's performance commitments. We consider the level of stretch applied to our final determinations is deliverable for an efficient company.	N/A
Thames Water Customer Challenge Group (CCG)	Deliverability of all performance commitments	Performance commitment levels	N/A	The Thames Water Customer Challenge Group noted concern about the deliverability of the performance commitment levels, given that Thames Water had noted that they would fail across many metrics as it stands. The group noted that it was important to consider how customers would feel about a plan, which is at 'high risk' of being undeliverable in many areas. It noted that customers in research sessions have not been told that performance commitment levels are undeliverable, and that customers expect a 'solid, predictable service', and do not believe in new water	No change for the final determination. We acknowledge the deliverability concerns raised by the Thames Water Customer Challenge Group. We consider the level of stretch applied to our final determinations is deliverable for an efficient company. The performance commitment levels have been developed in line with our framework, which aims to deliver: <ul style="list-style-type: none"> • affordable bills for all • great customer service • long-term resilience in the round • all underpinned by innovation 	N/A

Stakeholder	Performance commitment	Type	Our intervention for the draft determination	Summary of company representation	Our assessment and rationale for the final determination decision	Decisions for the final determination
				resource schemes until key metrics can be delivered.	We expect the company to deliver a solid and predictable service, while also stretching to performance commitment levels long term resilience and innovation.	
Thames Water Customer Challenge Group (CCG)	Priority services for customers in vulnerable circumstances	Performance commitment levels	<p>We intervened at draft determination to change the definition of the performance commitment by splitting the measure into 'attempted' (i.e. an outbound contact that has not received a response) and 'actual' contacts (i.e. updates to data based on contact with the customer).</p> <p>We also published reporting guidance for the common performance commitment, giving more information on definitions and how to report the measures.</p>	<p>The CCG states that Thames Water made representations to the CCG that the 50% performance commitment level for actual contacts is too high and that around 30% would be stretching but more realistic. The CCG states that from its members' experience and knowledge, 50% would seem to be overly challenging.</p> <p>The CCG urges us to ensure that the appropriate cross and pan industry learnings are fully considered before finally setting this particular target.</p>	<p>Change for the final determination.</p> <p>Given this performance commitment places specific emphasis on companies to check data, it is reasonable to expect success rates that are greater than what has been achieved so far.</p> <p>The company, along with representations from other companies of a similar nature, provides evidence from experience in the energy sector that improves our understanding of likely success rates. We consider that this is convincing evidence and have revised the performance commitment levels.</p>	N/A (see Table 1)
CCWater	Leakage PR19TMS_BW04	Performance commitment level	<p>The intervention we made at draft determination was to set the performance commitment percentage reduction levels to the following values:</p> <p>2020-21 = 5.0% 2021-22 = 12.5% 2022-23 = 17.3% 2023-24 = 21.2% 2024-25 = 25.0%</p> <p>Units: Percentage reduction from 2019-20 baseline using three-year average (%).</p>	<p>CCWater welcomes more stretching performance commitments. However it is concerned about the deliverability of a 25% reduction in leakage from 2019-20 levels, but it recognises that we acknowledge this performance commitment level as the most ambitious in the sector.</p> <p>CCWater states that given that Thames Water has not been able to meet its 'modest' performance commitment levels for 2015-20, the company is unlikely to meet the stretching performance commitment levels without a fundamentally different approach to leakage.</p> <p>CCWater considers leakage as a high priority and welcomes our ask for Thames Water to provide an action plan, which it hopes will outline how the company will achieve its leakage performance commitment level.</p>	<p>Change for the final determination.</p> <p>We continue to require that the company provides an action plan specifically to deliver its leakage performance commitment for 2020-25 which sets how the company will: continuously monitor performance against its PR19 leakage performance commitment; identify drivers of leakage performance and lessons learnt from both good and poor performance; identify measures to improve leakage performance and integrate these into the business; and ensure that this is a continuous rather than and one off process.</p> <p>We are revising the performance commitment level for this performance commitment – see our assessment and decision in Table 1.</p>	N/A (See Table 1)

Stakeholder	Performance commitment	Type	Our intervention for the draft determination	Summary of company representation	Our assessment and rationale for the final determination decision	Decisions for the final determination
				CCWater outlines that it is important for us to ensure the performance commitment level for leakage is 'deliverable', and the company must ensure that it is delivered.		
Environment Agency	Leakage PR19TMS_BW04	Performance commitment level	The intervention we made at draft determination was to set the performance commitment percentage reduction levels to the following values: 2020-21 = 5.0% 2021-22 = 12.5% 2022-23 = 17.3% 2023-24 = 21.2% 2024-25 = 25.0% Units: Percentage reduction from 2019-20 baseline using three-year average (%).	The Environment Agency notes how it is looking for Thames Water to get leakage 'under control'.	No change for the final determination. We welcome the view from the Environment Agency.	N/A
Thames Water Customer Challenge Group (CCG)	Leakage PR19TMS_BW04	Performance commitment level	The intervention we made at draft determination was to set the performance commitment percentage reduction levels to the following values: 2020-21 = 5.0% 2021-22 = 12.5% 2022-23 = 17.3% 2023-24 = 21.2% 2024-25 = 25.0% Units: Percentage reduction from 2019-20 baseline using three-year average (%).	The Thames Water Customer Challenge Group recognises that we do not consider that Thames Water provided sufficient evidence on how it would deliver on leakage. It notes that with the 'lower cost, lower investment' scenario combined with 'lower spend' means that Thames Water has identified it will increase operational risk. Therefore the Customer Challenge Group holds a concern that this will lead to an undeliverable plan, and would damage customers trust and confidence given the 'mutuality between customers and the company around water efficiency and leakage'.	No change for the final determination. We continue to require that the company provides an action plan specifically to deliver its leakage performance commitment for 2020-25 which sets how the company will: continuously monitor performance against its PR19 leakage performance commitment; identify drivers of leakage performance and lessons learnt from both good and poor performance; identify measures to improve leakage performance and integrate these into the business; and ensure that this is a continuous rather than and one off process. We also are intervened to protect customers by providing sufficient incentives to mitigate the risks around delivery of 2020-25 stretch. We are revising the performance commitment level for this performance commitment – see our assessment and decision in Table 1.	N/A (See Table 1)
Group Against Reservoir Development (GARD)	Leakage PR19TMS_BW04	Performance commitment level	The intervention we made at draft determination was to set the performance commitment	Group Against Reservoir Development considers that Thames Water is a poor performer on leakage, so its performance	No change for the final determination. We consider that this level of reduction is unachievable and economically inefficient over a single five-year period. This is because such as reduction has never been	N/A

Stakeholder	Performance commitment	Type	Our intervention for the draft determination	Summary of company representation	Our assessment and rationale for the final determination decision	Decisions for the final determination
			<p>percentage reduction levels to the following values:</p> <p>2020-21 = 5.0% 2021-22 = 12.5% 2022-23 = 17.3% 2023-24 = 21.2% 2024-25 = 25.0%</p> <p>Units: Percentage reduction from 2019-20 baseline using three-year average (%).</p>	<p>commitment level should be for more than a 50% reduction.</p>	<p>achieved historically over a one five-year period and does not align with the recommendation from the National Infrastructure Commission (2018) to halve leakage by 2050. We therefore consider that our final determination level is appropriate and we can identify no other reason why we should make a change.</p> <p>We are revising the performance commitment level for this performance commitment – see our assessment and decision in Table 1.</p>	
Group Against Reservoir Development (GARD)	Per Capita Consumption (PCC) PR19TMS_BW05	Performance commitment level	<p>The intervention we made at draft determination was to set the performance commitment percentage reduction levels to the following values:</p> <p>2020-21 = 1.1% 2021-22 = 2.3% 2022-23 = 3.4% 2023-24 = 4.4% 2024-25 = 6.3%</p> <p>Units: Percentage reduction from 2019-20 baseline using three-year average (%).</p> <p>The values are based on the 2024-25 percentage reduction of 6.3%.</p>	<p>Group Against Reservoir Development considers that neither Thames Water nor Affinity Water have allowed for the greater reduction of per capita consumption that will come from widespread introduction of smart metering and tariff structuring. It also considers that Thames Water has a history of over-forecasting its per capita consumption in its Water Resources Management Plans.</p>	<p>No change for the final determination</p> <p>Thames Water's draft determination intervention was made on the basis of taking the company's smart metering programme into consideration. The response from the Group Against Reservoir Development does not provide any additional evidence to change our view.</p>	N/A
CCWater	Sewer collapses PR19TMS_CS02	ODI type	<p>We did not intervene at draft determination on the ODI type for this performance commitment.</p>	<p>CCWater is concerned that customers do not support the principle of financial rewards for delivering services and the impact this may have on bills. It further notes that Thames Water is one of only three companies to have outperformance incentives for the sewer collapses performance commitment, and one of only two to potentially achieve outperformance for static performance. It does not think it is appropriate for a company to be 'rewarded with no stretch' even where their performance is already good.</p>	<p>No change to the final determination.</p> <p>In our draft determination, we assessed the company's current performance to be good and its forecast stretching, and that it had no past performance issues for sewer collapses. Its performance in 2015-20 and proposed (stable) performance for 2020-25 is better than upper quartile, and so we have not intervened. As such, we disagree with CCWater's assessment of stretch.</p> <p>We stated in our draft determination, 'The company has demonstrated customer support for the package of</p>	N/A

Stakeholder	Performance commitment	Type	Our intervention for the draft determination	Summary of company representation	Our assessment and rationale for the final determination decision	Decisions for the final determination
					<p>incentives, which includes the potential outperformance payment for mains repairs and sewer collapses performance commitment.' We have reviewed this evidence following CCWater's representation. The evidence shows that customers felt that a stable performance with no improvement was not stretching. However, they felt this was not that important as we are in the upper quartile of industry performance and felt money was needed for improvement in other areas.</p> <p>The results of the deliberative research with 320 customers states 'Customers think this is something that could potentially have very serious consequences and that these wouldn't always result in a reputational downside for Thames Water, and therefore think there needs to be added incentives to act on this.' It is not clear whether customers were offered an 'underperformance only' option.</p> <p>We consider that the performance commitment level is stretching, and that the company's deliberative research (which we consider to be of a good quality) on balance shows support for outperformance incentives. As such, we are not making a change for the final determination.</p>	
CCWater	Unplanned Outage PR19TMS_BW02	ODI rates	We intervened at draft determination to set the company's standard ODI underperformance rate at the upper bound of the reasonable range. We also introduced a two-tier ODI rate to recover enhancement allowances given to the company to improve its performance; these allowances are contingent on the company delivering the performance commitment levels its funding is granted for.	CCWater notes that Ofwat has imposed a more stretching performance commitment for unplanned outages. In view of the company's current performance, the draft determination allows Thames £77m additional funding in the price control to achieve this more stretching performance. In the event of underperformance, CCWater would like to understand how this additional funding will be treated given that it appears to exceed any underperformance.	<p>No change to the draft determination.</p> <p>Where we grant enhancement funding we also set a two tier ODI rate to recover enhancement funding. The rate applies between the performance commitment level and the performance level the funding was granted for.</p> <p>The rate is calculated as the total enhancement funding divided by the performance interval between the company's performance commitment level and the level of performance the funding was granted for.</p>	N/A
CCWater	Non-performance commitment specific	ODI rates	N/A	CCWater conducts additional customer research, finding that 74% of Thames Water's customers found the potential impact of ODIs	We note the results of CCWater's research, which shows that the majority of customers support the bill impacts of our draft determinations including ODIs. Whilst there is a	N/A

Stakeholder	Performance commitment	Type	Our intervention for the draft determination	Summary of company representation	Our assessment and rationale for the final determination decision	Decisions for the final determination
				<p>on their water bills over the period to be acceptable. It notes this is a lower level of acceptability than that achieved by the 'base' plan. It is concerned that customers do not support the principle of financial rewards for delivering services and the impact this may have on bills.</p>	<p>lower level of support than for our baseline draft determination, it is still a clear majority. As discussed in our assessment of methodology representations, we assess support for outperformance payments at a performance commitment-specific level, to most accurately reflect customer preferences.</p>	
Royal Borough of Kensington and Chelsea	<p>Understanding the risk of flooding in the Counters Creek area</p> <p>PR19TMS_CC</p>	New performance commitment	N/A	<p>The Council agrees with our conclusion at draft determination that 'there is insufficient evidence that Thames Water understands the risk of flooding in the Counters Creek area. For instance, it has previously stated that the risk of flooding comes from rainfall over a widespread area, but in presenting evidence that the risk is less than previously thought has focused on rainfall in the more immediate area of Counters Creek.' and is concerned that sewer flooding may reoccur in the future.</p> <p>The Council welcomes the overall performance level for surface water management, but it considers that not enough weight has been given to the issues of the Counters Creek catchment area and the plans set out do not involve areas upstream of Counters Creek. It is concerned that there are not measures to ensure that sustainable drainage systems. The company has proposed by March 2020 in the Counters Creek catchment will be delivered.</p> <p>Its main concern is sewer flooding in the borough as a result of the lack of sewer capacity in the Counters Creek area and how the company are addressing it. The council understands that it will mitigate this risk by further sustainable drainage systems in and upstream of the Counters Creek area.</p> <p>The Council propose the active delivery of strategic sustainable drainage systems in the Counters Creek catchment area as an outcome to be delivered and that this commitment is reflected in their business plan.</p>	<p>Change for the final determination.</p> <p>We note the Council's concerns that the company may not deliver the sustainable drainage systems it has proposed by 31 March 2020. Our proposed reconciliation of the 2015-20 performance commitment properties protected from flooding due to rainfall assumes it will deliver the integrated schemes that will deliver benefits to customers from increased flood protection. If these are not delivered we will take this into account in the autumn of 2020 when proposing the in period determination to take account of the complete data we will have by then on performance for the 2015-20 period.</p> <p>We note that the stakeholder agrees that the company has not demonstrated it understands the risk of flooding in the Counters Creek catchment. Without understanding the existing risk it is not possible to specify the interventions required, including further implementation of sustainable drainage systems, to reduce the risk of sewer flooding to resilient and acceptable levels both now and in the future.</p> <p>We consider there is insufficient evidence to be able to amend the Surface water management performance commitment without the risk of flooding in the Counters Creek area first being understood. We encourage the company to consider what measures it can deliver upstream of Counters Creek that will improve resilience.</p> <p>We consider that the Council has provided sufficient and convincing evidence for us to introduce a new performance commitment concerning flooding in the Counters Creek area. We consider that the performance commitment should have a reasonable time-frame for completion before the end of the 2020-25 period in order to allow for sufficient time to influence choices regarding</p>	<p>We introduce a new performance commitment to demonstrate Thames Water understands the risk of flooding in the Counters Creek area.</p> <p>We introduce this performance commitment as non-financial, but we could take regulatory action if we consider Thames Water is not delivering its statutory duties that could include underperformance payments.</p>

Stakeholder	Performance commitment	Type	Our intervention for the draft determination	Summary of company representation	Our assessment and rationale for the final determination decision	Decisions for the final determination
				Sufficient detail should be provided to demonstrate how the sustainable drainage systems in question provide adequate mitigation works with the Flooding Local Improvement Process to ensure that there is sufficient mitigation in the absence of a storm relief sewer. A timetable for their implementation should also be included.	sustainable drainage systems in the Counters Creek catchment prior to the start of the 2025-30 period. We consider that delivery should occur before July 2023 to allow sufficient time for full consideration of this complex area.	
Business Stream	Smart metering performance commitments	Performance commitment definition	We set a bespoke performance commitment relating to delivering smart meters for several companies. We allow a substantial enhancement expenditure allowance to some companies, beyond their base maintenance allowance, for this programme of work in our final determinations. These performance commitments ensure that these enhancement costs will be recovered for customers if a company does not deliver or partially delivers the programme.	One retailer stakeholder (Business Stream) proposes extending the scope of smart metering performance commitments to include business properties. It argues that this could potentially contribute towards addressing the current shortage of metering capacity in the business retail market.	<p>No change for the final determination.</p> <p>The inclusion of smart metering programmes in business plans is a result of the water resources management planning process, which identify options to increase supply and reduce demand. This will have included consideration of both business and residential smart metering options. It is important that both the funding and performance commitment definitions for these programmes are aligned to their scope. We do not consider it to be feasible to amend the performance commitments without a corresponding change to cost adjustment claims because they are so linked.</p> <p>The company's enhancement allowance is related to the company's request that is specifically related to residential retail meter. As such, we do not consider there is sufficient and convincing evidence to change the performance commitment definition.</p>	N/A
Business Stream, UK Water Retailer Council	Non-household void sites	Performance commitment definition	We set a bespoke performance commitment for some companies (Severn Trent Water, SES Water, South East Water, Thames Water, and United Utilities) regarding non-household void sites. We set a bespoke performance commitment for some companies (Severn Trent Water, Northumbrian Water, United Utilities, and Wessex Water) regarding non-household gap sites	<p>Two retailer stakeholders (Business Stream, UK Retailer Water Council) welcome incentives to reduce non-household void and gap properties but said it significantly increases the likelihood of wholesalers unilaterally activating charges on retailers for void properties, introducing unmanageable cost and risk for retailers. They also note data quality issues in the market database.</p> <p>They also state that void and gap performance commitments are inconsistent in process, design and incentive rates. One representation proposes that we temporarily suspend the introduction of the PR19 incentives and</p>	<p>Change for the final determination.</p> <p>With regards to the concerns raised in relation to the charging levels that wholesalers could apply to vacant properties and data quality issues, we are considering this point as part of our ongoing review of incumbent water company support for the development of effective markets. While we cannot require companies to share outperformance payments with retailers, we would expect this to be considered by companies given the joint role both play in identifying and reducing the level of gaps and void sites in the market.</p> <p>Retailers may deal with multiple wholesalers and so bespoke performance commitments can risk</p>	We include a clause for all relevant performance commitments which confirms that we will take into account the financial consequences of any retail market mechanism which may be developed, for example, under the Market Performance Framework, when making in-period determinations.

Stakeholder	Performance commitment	Type	Our intervention for the draft determination	Summary of company representation	Our assessment and rationale for the final determination decision	Decisions for the final determination
				<p>charges for vacant properties until an industry-wide solution is agreed.</p> <p>They state that wholesalers might not share financial incentives with retailers, despite the costs of bringing vacant sites into charging potentially being incurred by retailers. One of the stakeholders proposes a consistent scheme for sharing payments with retailers.</p>	<p>exacerbating market frictions from cumbersome wholesaler-retailer interactions. The Retailer Wholesaler Group (RWG) is developing a set of consistent processes for implementing financial incentives relating to business gaps sites and voids by April 2020. In April 2020 we will ask each of the six wholesalers with bespoke performance commitments on gaps or voids to set out the steps they have taken to ensure that the introduction of these bespoke performance commitments will not exacerbate problems associated with wholesaler-retailer interactions.</p> <p>It is possible that, at some time during the 2020-25 period, a common financial incentive on gaps and/or voids is developed by market participants (for example this could be developed at part of the reform of the Market Performance Framework). If industry was planning to introduce a common financial incentive on business voids, we would consider, with those companies which have bespoke performance commitments on business retail gaps and voids, the appropriate way to take such a measure into account in their future in-period determinations. For performance commitments relating to non-household gaps or void sites, we therefore include a clause which confirms that we will take into account the financial consequences of any retail market mechanism which may be developed, for example, under the Market Performance Framework, when making in-period determinations.</p> <p>We discuss this topic in more detail in the ‘Business retail market representations’.</p>	
Bazalgette Tunnel Limited (‘Tideway’)	Performance commitments relating to the Thames Tideway Tunnel project	Performance commitments and ODIs	We intervened on the company’s bespoke performance commitments ET01, ET02 and ET04. We removed ET03 and set new performance commitments ET05 and ET06.	Tideway provides detailed feedback and proposals relating to all project-related performance commitments, including a new performance commitment for handback of project land.	<p>Change for the final determination.</p> <p>We set out our assessment, reasons and decisions for these performance commitments in ‘Thames Water – Thames Tideway Tunnel performance commitments additional information appendix’.</p>	We set out our assessment, reasons and decisions for these performance commitments in ‘Thames Water – Thames Tideway Tunnel performance commitments additional information appendix’.

Table 3: Thames Water - Changes to the draft determination not due to a representation

Performance commitment	Type	Our intervention for the draft determination	Our assessment and rationale for the final determination decision	Decisions for the final determination
N/A	ODI rates	We intervened on some ODI rates at draft determination.	<p>Change for the final determination.</p> <p>For final determinations we revise some ODI rates on which we have previously intervened due to updates in the underlying data used to calculate the ODI rates. In particular, we update the data on the number of connections to reflect the latest information available. In most cases this has only a small impact on the ODI rates.</p> <p>We update all ODI rates where we calculate a 'delay' or 'cost-recovery' rate using the weighted average cost of capital and/or other regulatory parameters to reflect the values we are using in our final determination.</p> <p>We also make a small number of corrections for where we have identified errors in our draft determination calculations. The final ODI rates are specified in Thames Water – Outcomes performance commitment appendix.</p>	We change ODI rates where the underlying data used to calculate the rate has been updated, or an error has been identified.
<p>Leakage</p> <p>PR19TMS_BW04</p>	Performance commitment definition	No intervention at draft determination.	<p>Change for the final determination.</p> <p>To avoid any misinterpretation regarding the value for the company's 2019-20 leakage target, we amend the performance commitment definition to clarify the requirement for all companies.</p>	<p>We amend the wording of the performance commitment definition to the following:</p> <p>'As a minimum, if, using the PR14 calculation of leakage set out in the PR14 performance commitment, a company does not meet its 2019-20 leakage performance commitment level (specified in our PR14 final determinations), the company's actual level for 2019-20 will, for the purposes of setting the baseline for the 2020-25 period, be adjusted downwards by one third of the difference between the value derived from the PR14 2019-20 performance commitment level and the actual level for 2019-20. For PR14 performance commitments set on a three or five year average basis, we assume the 2019-20 annual performance commitment level is equal to the average level specified in the PR14 performance commitment.'</p>
Empty household properties	ODI rates	Our intervention at draft determination was to adjust the ODI rate based on an average wholesale bill of £358, marginal costs of £30, a cost sharing factor of 50%, and	<p>Change for the final determination.</p> <p>As we explain in the 'Delivering outcomes for customers policy appendix', we revise our methodology for performance commitments concerning 'void properties'. We remove the cost sharing factor, as there is no cost sharing for the retail price control.</p>	<p>We revise ODI rates to:</p> <p>Underperformance: -£7.710m per 1%.</p>

Performance commitment	Type	Our intervention for the draft determination	Our assessment and rationale for the final determination decision	Decisions for the final determination
PR19TMS_ER02		<p>property numbers as provided by the company. The new rates are:</p> <p>Underperformance: -£19.152m per 1%</p> <p>Outperformance: £9.995m per 1%</p>	<p>We also calculate the financial incentive based on a weighted incentive rate based on the number of customers between single and dual services to more accurately align incentives to the customer benefit.</p> <p>We also apply a symmetric 50% sharing ratio to protect customers against the impact of macroeconomic factors. This is applied symmetrically to underperformance and outperformance payments. The change in methodology is due to representations from a number of companies, we consider that together the arguments and evidence provided are sufficient and convincing for us to change the voids ODI rate methodology to share the risk between the company and customers.</p>	<p>Outperformance: £7.710m per 1%.</p>
<p>Empty household properties</p> <p>PR19TMS_ER02</p>	Caps, collars and deadbands	We did not set a cap or collar in the draft determination.	<p>Change for the final determination.</p> <p>As we explain in the 'Delivering outcomes for customers policy appendix' we consider that performance commitments that measure the percentage of void properties are uncertain and all companies should have caps and collars. We also explain how we set the level of caps and collars.</p>	<p>We set collar levels to:</p> <p>2020-21 = 4.16 2021-22 = 4.00 2022-23 = 3.83 2023-24 = 3.67 2024-25 = 3.52</p> <p>Units: %</p> <p>We set cap levels to:</p> <p>2020-21 = 3.16 2021-22 = 3.00 2022-23 = 2.83 2023-24 = 2.67 2024-25 = 2.50</p> <p>Units = %</p>
<p>Delivery of Drainage and Wastewater Management Plans (DWMPs)</p> <p>PR19TMS_DWMP</p>	New performance commitment	N/A	<p>Change for the final determination.</p> <p>We allow a cost allowance in relation to the development of the company's Drainage Water Management Plans (DWMPs).</p> <p>To provide transparency of delivery and ensure that the company shares any learning from its investment in this area, we set a new performance commitment with reputational incentives.</p> <p>We design this performance commitment to incentivise companies to develop voluntary drainage and wastewater management plans in accordance with the Drainage and Wastewater Management Plan framework developed by Water UK, to</p>	<p>We set a new performance commitment with reputational incentives.</p> <p>The performance commitment will measure the cumulative percentage of catchments in which the company implements the Level 1 water company drainage and wastewater management plan, in accordance with the drainage and wastewater management plan framework guidelines.</p> <p>This measurement will apply from 31 December 2022, which is the expected</p>

Performance commitment	Type	Our intervention for the draft determination	Our assessment and rationale for the final determination decision	Decisions for the final determination
			support the government plans of making the drainage and wastewater management plans a statutory obligation for the wastewater and sewerage companies.	<p>delivery date for the company's drainage and wastewater management plans.</p> <p>The company will report delivery once for the 2022-23 reporting year unless there is non-delivery (a performance commitment level of less than 100%), in which case the company will continue to report on an annual basis until 100% delivery is achieved.</p>
<p>Environmental measures delivered</p> <p>PR19TMS_ES02</p>	ODI rate	Our intervention at draft determination was to set the underperformance rate to £0.0341m per delayed scheme each year.	<p>Change for the final determination.</p> <p>We change the company's ODI rate on this performance commitment to reflect its final cost allowances and cost sharing rates. We update the company's ODI rates using our standard methodology in our 'Delivering outcomes for customers policy appendix'.</p>	We change the company's underperformance rate to -£0.0513m per unit.
<p>Mains repairs</p> <p>PR19TMS_BW01</p>	Caps, collars and deadbands	<p>At draft determination we set collars levels to:</p> <p>2020-21 = 347.0 2021-22 = 347.0 2022-23 = 347.0 2023-24 = 347.0 2024-25 = 347.0</p> <p>Units: mains repairs per 1,000km of mains</p> <p>At draft determination we set cap levels to:</p> <p>2020-21 = 178.3 2021-22 = 178.3 2022-23 = 178.3 2023-24 = 178.3 2024-25 = 178.3</p> <p>Units = mains repairs per 1,000km of mains</p>	<p>Change for the final determination.</p> <p>The company does not make a representation regarding the caps and collars for this performance commitment. We explain in the 'Delivering outcomes for customers policy appendix' how we set the levels for caps and collars. For mains repairs we set the collar at 1.4 times the 2020-21 performance commitment level for this company, in line with our standard policy.</p> <p>The levels for the outperformance cap are based on estimates of the P90 performance, which has changed. Our approach to adjusting the estimates of P10 and P90 performance levels is set out in 'Delivering outcomes for customers policy appendix'.</p>	<p>We set collar levels to:</p> <p>2020-21 = 372.3 2021-22 = 372.3 2022-23 = 372.3 2023-24 = 372.3 2024-25 = 372.3</p> <p>Units: mains repairs per 1,000km of mains</p> <p>We set cap levels to:</p> <p>2020-21 = 212.9 2021-22 = 209.2 2022-23 = 205.5 2023-24 = 201.8 2024-25 = 198.1</p> <p>Units = mains repairs per 1,000km of mains</p>

Performance commitment	Type	Our intervention for the draft determination	Our assessment and rationale for the final determination decision	Decisions for the final determination
<p>Unplanned outage</p> <p>PR19TMS_BW02</p>	<p>Caps, collars and deadbands</p>	<p>We did not set a collar in the draft determination.</p>	<p>Change for the final determination.</p> <p>The company does not make a representation regarding the collar for this performance commitment. We explain in the 'Delivering outcomes for customers policy appendix' that we apply caps and collars for all companies and how we set these levels.</p> <p>Unplanned outage is a new measure and we consider the most robust data is for 2018-19 and so have relied most on this sole year to consider the collars required to provided sufficient protection to customers and appropriate incentives to customers. All companies' performance in 2018-19, apart from Thames Water, were below a multiple of two of the company's 2020-21 committed performance level. Most were below this level in previous years as well. Thames Water performance in 2018-19 was 18% and its 2020-21 committed performance level is 6%. Thames Water has a specific cost allowance to improve performance and so it is important that ODIs apply if it does not improve. We apply a collar at four times 2020-21 performance to give it an incentive to improve.</p> <p>In the performance commitment appendix the collars are 'Standard underperformance collar for tier 2 standard underperformance rate'.</p> <p>We have limited the estimate of P10 performance to no more than 2 times the 2020-21 performance as we consider an efficient company would not exceed this level.</p>	<p>We set collar levels to:</p> <p>2020-21 = 24.00 2021-22 = 24.00 2022-23 = 24.00 2023-24 = 24.00 2024-25 = 24.00</p> <p>Units: Percentage of peak week production capacity (%)</p>
<p>Per capita consumption</p> <p>PR19TMS_BW05</p>	<p>Caps, collars and deadbands</p>	<p>At draft determination we set cap levels to:</p> <p>2020-21 = 4.6 2021-22 = 5.7 2022-23 = 6.9 2023-24 = 7.9 2024-25 = 9.7</p> <p>Units: Percentage reduction from baseline (2019-20) using 3 year average</p>	<p>Change for the final determination.</p> <p>The levels for the outperformance cap are based on estimates of the P90 performance, which has changed slightly. Our approach to adjusting the estimates of P10 and P90 performance levels is set out in 'Delivering outcomes for customers policy appendix'.</p>	<p>We set cap levels to:</p> <p>2020-21 = 4.6 2021-22 = 5.8 2022-23 = 6.9 2023-24 = 7.9 2024-25 = 9.8</p> <p>Units: Percentage reduction from baseline (2019-20) using 3 year average</p>

Performance commitment	Type	Our intervention for the draft determination	Our assessment and rationale for the final determination decision	Decisions for the final determination
<p>Water quality compliance (CRI)</p> <p>PR19TMS_BW06a</p>	Caps, collars and deadbands	We did not set a collar in the draft determination.	<p>Change for the final determination.</p> <p>As we explain in the 'Delivering outcomes for customers policy appendix' we consider that CRI is uncertain and all companies should have a collar set in line with our standard approach. In the appendix we also explain how we set the level of the collar in the final determination.</p>	<p>We set collar levels to:</p> <p>2020-21 = 9.5 2021-22 = 9.5 2022-23 = 9.5 2023-24 = 9.5 2024-25 = 9.5</p> <p>Unit = Compliance Risk Index Score</p>
<p>Clearance of blockages</p> <p>PR19TMS_CS04</p>	Caps, collars and deadbands	<p>At draft determination we set cap levels to:</p> <p>2020-21 = 68,788 2021-22 = 63,788 2022-23 = 63,788 2023-24 = 63,788 2024-25 = 58,788</p> <p>Units = Number of sewer blockage events that required clearing.</p>	<p>Change for the final determination.</p> <p>The levels for the outperformance cap are based on estimates of the P90 performance, which has changed. Our approach to adjusting the estimates of P10 and P90 performance levels is set out in 'Delivering outcomes for customers policy appendix'. The P90 estimates that we calculate have changed and therefore so have the levels of the caps.</p>	<p>We set cap levels to:</p> <p>2020-21 = 66,288 2021-22 = 63,788 2022-23 = 61,288 2023-24 = 58,788 2024-25 = 56,288</p> <p>Units = Number of sewer blockage events that required clearing.</p>
<p>Power resilience</p> <p>PR19TMS_DWS01</p>	P10 performance levels	N/A	<p>Change for the final determination.</p> <p>Our approach to adjusting the estimates of P10 and P90 performance levels is set out in 'Delivering outcomes for customers policy appendix'.</p> <p>To estimate P10 performance levels in this case, we use the performance commitment levels set at final determination. We take this approach because this performance commitment reflects delivery of a planned scheme, and we consider that the experience in the water industry is that planned schemes are delivered in most cases. It would be a scenario that would occur in less than 10% of cases that the company would not deliver its performance commitment.</p>	<p>We estimate P10 performance levels as:</p> <p>2020-21 = NA 2021-22 = NA 2022-23 = NA 2023-24 = NA 2024-25 = 47</p> <p>Units: Number of sites to zero decimal places</p>

Performance commitment	Type	Our intervention for the draft determination	Our assessment and rationale for the final determination decision	Decisions for the final determination
SEMD - Securing our sites (2020-25 projects) PR19TMS_DWS02	P10 performance levels	N/A	<p>Change for the final determination.</p> <p>Our approach to adjusting the estimates of P10 and P90 performance levels is set out in 'Delivering outcomes for customers policy appendix'.</p> <p>To estimate P10 performance levels in this case, we use the performance commitment levels set at final determination. We take this approach because this performance commitment reflects delivery of a planned scheme, and we consider that the experience in the water industry is that planned schemes are delivered in most cases. It would be a scenario that would occur in less than 10% of cases that an efficient company would not deliver its performance commitment.</p>	<p>We estimate P10 performance levels as:</p> <p>2020-21 = 0 2021-22 = 25 2022-23 = 50 2023-24 = 75 2024-25 = 100</p> <p>Units: Percentage</p>
SEMD - Securing our sites (legacy projects) PR19TMS_DWS03	P10 performance levels	N/A	<p>Change for the final determination.</p> <p>Our approach to adjusting the estimates of P10 and P90 performance levels is set out in 'Delivering outcomes for customers policy appendix'.</p> <p>To estimate P10 performance levels in this case, we use the performance commitment levels set at final determination. We take this approach because this performance commitment reflects delivery of a planned scheme, and we consider that the experience in the water industry is that planned schemes are delivered in most cases. It would be a scenario that would occur in less than 10% of cases that an efficient company would not deliver its performance commitment.</p>	<p>We estimate P10 performance levels as:</p> <p>2020-21 = 7.0 2021-22 = 27.0 2022-23 = 52.0 2023-24 = 77.0 2024-25 = 100.0</p> <p>Units: Percentage</p>
Environmental measures delivered PR19TMS_ES02	P10 performance levels	N/A	<p>Change for the final determination.</p> <p>Our approach to adjusting the estimates of P10 and P90 performance levels is set out in 'Delivering outcomes for customers policy appendix'.</p> <p>To estimate P10 performance levels in this case, we use the performance commitment levels set at final determination. We take this approach because this performance commitment reflects delivery of a planned scheme, and we consider that the experience in the water industry is that planned schemes are delivered in most cases. It would be a scenario that would occur in less than 10% of cases that the company would not deliver its performance commitment.</p>	<p>We estimate P10 performance levels as:</p> <p>2020-21 = 180 2021-22 = 446 2022-23 = 534 2023-24 = 595 2024-25 = 757</p> <p>Units: Number of WINEP schemes completed each year to zero decimal places</p>
Installing new smart meters in London PR19TMS_M01	P10 performance levels	N/A	<p>Change for the final determination.</p> <p>Our approach to adjusting the estimates of P10 and P90 performance levels is set out in 'Delivering outcomes for customers policy appendix'.</p> <p>To estimate P10 and P90 performance levels in this case, we use the company's P10 and P90 performance levels that it proposed in its representations (table OC1,</p>	<p>We estimate P10 performance levels as:</p> <p>2020-21 = 56,881 2021-22 = 132,578 2022-23 = 208,314 2023-24 = 284,072 2024-25 = 359,774</p>

Performance commitment	Type	Our intervention for the draft determination	Our assessment and rationale for the final determination decision	Decisions for the final determination
			August 2019). We take this approach because this performance commitment was not included in the company's April business plan submission.	Units: Number of smart meters to zero decimal places
Replacing existing meters with smart meters in London PR19TMS_M02	P10 performance levels	N/A	Change for the final determination. Our approach to adjusting the estimates of P10 and P90 performance levels is set out in 'Delivering outcomes for customers policy appendix'. To estimate P10 and P90 performance levels in this case, we use the company's P10 and P90 performance levels that it proposed in its representations (table OC1, August 2019). We take this approach because this performance commitment was not included in the company's April business plan submission.	We estimate P10 performance levels as: 2020-21 = 11,712 2021-22 = 23,423 2022-23 = 35,135 2023-24 = 46,847 2024-25 = 58,559 Units: Number of smart meters to zero decimal places
Smarter Water Catchment Initiatives PR19TMS_EWS02	P10 performance levels	N/A	Change for the final determination. Our approach to adjusting the estimates of P10 and P90 performance levels is set out in 'Delivering outcomes for customers policy appendix'. To estimate P10 performance levels in this case, we use the company's 2024-25 P90 performance levels that it proposed in its representations (table OC1, August 2019). We take this approach because the company's business plan data, provided in April 2019, did not include P10 performance levels for the years 2020-24.	We estimate P10 performance levels as: 2020-21 = 0 2021-22 = 2 2022-23 = 2 2023-24 = 2 2024-25 = 2 Units: Number of catchments to zero decimal places
Water quality compliance (CRI) PR19TMS_BW06a	P10 performance levels	N/A	Change for the final determination. Our approach to adjusting the estimates of P10 and P90 performance levels is set out in 'Delivering outcomes for customers policy appendix'. To estimate P10 performance levels in this case, we form our own estimates of P10 performance based on judgement. We take this approach because the company does not provide P10 performance levels in its business plan submission, and we consider that the P10 performance levels provided in its representations are unduly pessimistic and not credible for an efficient company.	We estimate P10 performance levels as: 2020-21 = 6.94 2021-22 = 6.88 2022-23 = 6.78 2023-24 = 6.56 2024-25 = 6.34 Units: Numerical CRI score, reported to two decimal places

Ofwat (The Water Services Regulation Authority) is a non-ministerial government department. We regulate the water sector in England and Wales.

Ofwat
Centre City Tower
7 Hill Street
Birmingham B5 4UA

Phone: 0121 644 7500
Fax: 0121 644 7533
Website: www.ofwat.gov.uk
Email: mailbox@ofwat.gov.uk

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