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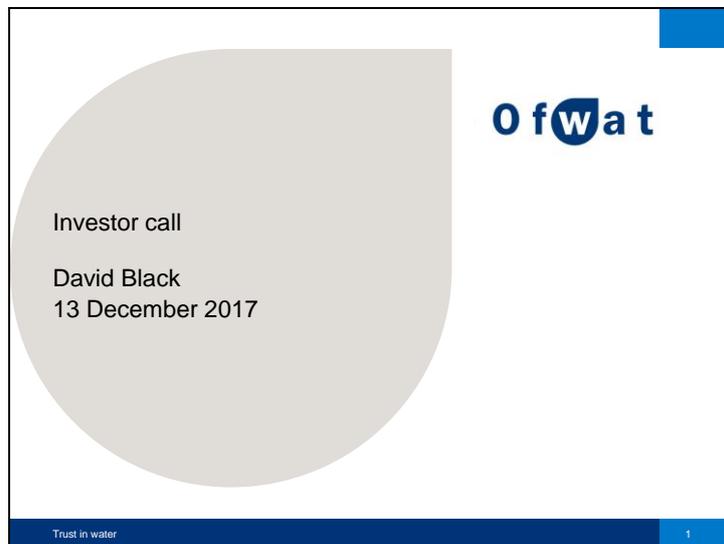
Trust in water

# **PR19 final methodology 13 December 2017 investor call: transcript and slides**

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Slide 1

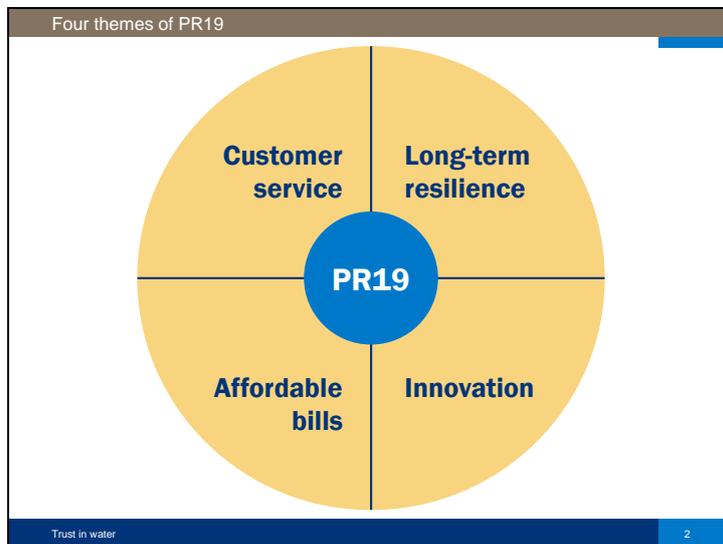


Operator: Good afternoon, ladies and gentlemen. Thank you for standing by and welcome to the City Briefing webcast. At this time, our audio participants are in a listen-only mode.

And during the presentation, we'll have a question and answer session. And at the time, if you wish to ask your question, you'll need to press star and one on your telephone keypad. Alternatively, you can submit questions anytime via the webcast these will be answered at the end.

I must advise you that the webcast is being recorded today, Wednesday, the 13th of December 2017. And right now, I'd like to hand it to your presenter today, David Black. Please go ahead, sir.

Slide 2



David Black: Thank you, Jenni. And, good afternoon, everyone. And welcome to the Ofwat City Investor Call. So the water sector sector has been more in the public eye in 2017 than might normally be the case. In many ways, that's a good thing.

In many ways, that's good thing, it's shone a light on a sector that's fundamental to everyone in the U.K. and isn't normally seen as newsworthy. We've seen positive new stories about how companies are removing fatbergs from sewers and using drones to detect leaks.

But we're also seeing the less positive stories particularly on how companies are financed and run. And all these new stories matter because customers in England and Wales feel differently about water to many other services.

Customers expect great service, at least comparable with the service they get elsewhere. They expect water and wastewater services to be resilient to both short-term shocks and long-term challenges such as population growth and climate change. They expect those services to be affordable for all and actually help those struggling to pay.

So our 2019 price review enables, incentivises and encourages water companies to innovate, and find new and better ways of achieving things that matter to customers.

That's why the four themes for our 2019 price review are great customer service, resilience in the round, affordability and innovation.

We see these as directly linked to the delivery of our strategy of trust and confidence in water. On the 11th of July we published our draft methodology and we spoke with many of you a day later where we set out what our draft methodology would do and how it would work.

Our methodology builds on the 2014 price review and the work we have carried out in our Water 2020 programme to evolve our regulatory framework for 2019 and beyond.

We received more than 60 responses to our consultation, twice as many as we received at the same stage in PR14. We're grateful to those that took the time to respond to us. We've listened to the responses that we've received, changed our approach where we have been convinced that we needed to change and maintain our approach where we weren't.

I'm now going to step through the key elements of the review and flag the changes since our methodology before going to our Q&A session

Slide 3

Initial assessment of plans – categorisation of plans		
Reputational	Procedural incentives	Financial incentives
<b>Exceptional</b>		
Published performance relative to peers and public recognition	Early draft determination (March or April 2019) with early certainty principle applied to specified component of costs and outcomes. Companies can opt out of the early certainty principle.	An amount equivalent to a 20 basis points (bp) to 35bp addition to the return on regulated equity (RORE) over the whole price review period, based on the notional gearing of 60%. Standard cost sharing rates.
<b>Fast track</b>		
Published performance relative to peers	Early draft determination (March or April 2019) with early certainty principle applied to specified component of costs and outcomes. Companies can opt out of the early certainty principle.	An amount equivalent to a 10 basis points (bps) addition to the return on regulated equity (RORE) over the whole price review period, based on the notional gearing of 60%. Standard cost sharing rates.
<b>Slow track</b>		
Published performance relative to peers	Draft determination in July 2019. Business plans will require a level of material intervention to protect the interests of customers. These companies may be required to resubmit some of their business plans or to provide additional evidence.	Standard cost sharing rates.
<b>Significant scrutiny</b>		
Published performance relative to peers	Draft determination in July 2019. Business plans will require extensive material intervention to protect the interests of customers. These companies may need to substantially rework their plans. Companies whose plans fall into this category will require increased ongoing regulatory scrutiny and assurance. We may put extra measures in place to protect customers from risks associated with poor business planning. These companies may also be subject to strengthened reporting requirements.	Reduced cost sharing rates. Companies will share only 25% of cost outperformance and bear 75% of cost underperformance. Potential cap on ODI outperformance payments.
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Firstly, on the initial assessment of business plans, our overall approach to the assessment company plans remains the same as we proposed in July.

It's all about incentivising companies to deliver plans with more of what matters to their customers. That means business plan should be right the first time, without requiring Ofwat to step in and force company to be efficient and set themselves stretching performance commitments.

We'll be assessing company business plans on their quality, ambition, and innovation. And we'll categorize companies into four categories: exceptional, fast-tracked, slow-tracked, and significant scrutiny.

Exceptional plans are plans which are high quality, ambitious and innovative. These are plans that really shift the cost and performance frontier to benefit customers.

To reflect the effort companies with exceptional plans put in and the risk they will take, they will receive a one-off amount equivalent to 20 to 35 basis points addition on the return on regulatory equity over the whole price review period.

We will decide on the point in the 20 to 35 range based on the level of ambition and innovation showed in the plan. In our July consultation we proposed 20 basis points, so this range has increased from our methodology consultation.

Companies with exceptional plans will receive an early draft determination with reputational benefits. And this draft determination will include - if companies elect to take it – early certainty on cost adjustment claims, bespoke performance commitment levels, and outperformance and underperformance payment rates for outcome delivery incentives.

Fast-tracked plans are plans which are really high quality where we consider that they require no, minor or limited interventions in the customer interest, but are not frontier shifting in their ambition and innovation. Here, we've also modified our approach. As well as an early draft determination - including the optional early certainty - and reputational benefits, they will also receive a one off amount equivalent to a 10 basis points addition on the return on regulatory equity over the whole price review period.

Slow-tracked plans are plans that do require a level of material interventions by Ofwat to protect customers, such as from failure to manage or mitigate risks to resilience, inefficient costs or insufficiently stretching performance commitments or over-generous incentives.

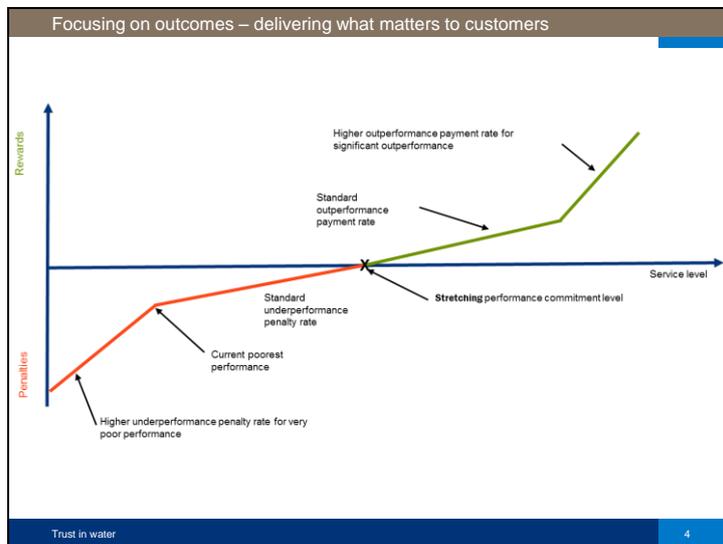
Companies with slow-tracked plans may be required to resubmit parts of their business plan or to provide additional evidence. They're likely to find PR19 challenging. They'll be required to deliver on stretching cost and performance commitments, and because they're less likely to be efficient or have weaker service performance or both, they're likely to start the new regulatory period behind these targets.

So unless they take up the challenge on cost and performance, they'll be more exposed to outcome delivery incentive penalties and reduced cost-sharing rates.

Significant scrutiny plans are plans that fall well short of our expectations and raise serious concerns as to whether the evidence and data provided provide a satisfactory basis for the final determination.

Now there's no reason why any company should end up in this category, and the consequences of poor quality plans are serious. It'll be difficult to rely on company information, and so to protect customers, we will be setting tough cost-sharing rates to ensure there's little benefit to companies from providing poor business plan information. Outperformance payments could be capped on bespoke and potentially common performance outcomes too. I think there'll be a reputational impact of being identified as having an inadequate business plan and potentially increased future assurance requirements.

Slide 4



Moving on to outcomes. Outcomes are the high-level objectives that matter most to customers. We are keeping the overall approach that we outlined in our consultation.

We're expecting companies to engage extensively with their customers on setting their outcomes with assurance on this engagement process provided by independent customer challenge groups.

We'll be encouraging companies to propose stretching performance commitments, supported by a long-term projection to at least 2035 of their expected performance levels so that customers can benefit from improved service quality and companies focus on the longer term.

We're expecting companies to set stretching bespoke performance commitments based on customer priorities and we'll be requiring all companies to have 14 common performance commitments and to set stretching levels for them.

Following consultation responses, we have modified our approach to performance commitments so that we challenge companies to achieve the forecast upper quartile performance level for each year

of the price review period rather than applying a 2024-2025 upper quartile requirement from 2020-21 onwards.

For supply interruptions, internal sewer flooding and pollution incidents, we expect companies to propose performance commitments that are at least the forecast upper quartile performance for each year. And we will also challenge companies to reduce leakage by 15 percent by 2025 and I think it's great to see that some companies are already taking up this challenge.

As we set out in our consultation, we will be bringing ODI outperformance payments and underperformance penalties closer in time to the performance they relate to. This will better align the interests of company management and investors with customers

We expect companies ODI proposals will drive an expected range of ODI out-and under-performance payments ranging from plus or minus one to three percent of return on regulatory equity, but this is not capped.

This range includes enhanced outperformance and underperformance payments for frontier-shifting performance on the common performance commitments as set out in the graph.

We expect companies to propose approaches to protecting customers in case their ODI payments turn out to be above or outside their expected RORE range for ODIs.

On balance, a company that delivers levels of performance that's consistent with our benchmarks in 2020 to 2025 would neither receive outperformance payments nor underperformance penalties on their ODIs.

We're also introducing our new customer measure of experience and developer services measure of experience through C-MeX and D-MeX respectively.

These will incentivise companies to improve their customer service which still lags behind other sectors. C-MeX includes customer satisfaction for customers who have not contacted their water company as well as those that do and will include a comparison with upper quartile performance in other sectors.

We've modified our approach to C-MeX since the methodology consultation so that access to enhanced financial payments is conditional on a company having satisfactory performance on complaints.

For D-MeX, following consultation responses, we will include an element based on service performance metrics as well as customer satisfaction.

Slide 5

Cost efficiency – stretching further

	← More efficient business plans						
	70	80	90	100	110	120	130
Totex ratio <sup>1</sup>							
Cost sharing rate for outperformance <sup>2</sup>	65%	65%	60%	50%	40%	35%	35%
Cost sharing rate for underperformance <sup>3</sup>	50%	50%	50%	50%	60%	65%	65%

<sup>1</sup> Ratio of company view to our view of totex (%)  
<sup>2</sup> Percentage of outperformance company gets to keep. The remainder is passed on to consumers through lower bills.  
<sup>3</sup> Percentage of cost overrun company has to bear. The remainder is passed on to consumers through higher bills.

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Cost efficiency. We expect a step change in cost efficiency for the sector. Customers depends on water companies taking action to drive efficiency in their businesses and company should challenge their own plans to make sure that they don't contain any inefficiency.

The totex and outcomes approach which we introduced at PR14 and are continuing with in PR19, gives companies the flexibility to decide how best to deliver their services, and to use the most cost-efficient and innovative approaches. Totex and outcomes has delivered significant gains in other sectors, with early evidence of efficiency gains in the water sector too.

As we set out in our July consultation, we will not use a menu approach as an incentive to submit accurate cost forecasts. Instead we will use a mechanism based on cost sharing as an incentive for companies to submit efficient cost forecasts.

The mechanism works such that efficient plans will get more favourable cost sharing rates than inefficient plans – they will be able to keep a higher proportion of savings and bear a lower proportion of cost overruns.

We have adjusted our proposed cost sharing rates to provide a stronger incentive for companies to submit efficient business plans and to ensure the scheme better protects customers against inefficient business planning and against perceived risks around gaming.

The new cost sharing scheme is shown in the slide. When a company submits its business plan, its totex ratio will be determined by the ratio of its totex forecast to our view of efficient totex. This will, in turn, determine its cost sharing rates. Each company will have one cost sharing rate for outperformance, and another rate for underperformance.

The cost sharing mechanism will apply for the total revenue controls only, water resources, water network plus and wastewater network plus. This will not apply to plans which are assessed as significant scrutiny. We will set those companies a cost sharing rate of 75% for underperformance and 25% for outperformance. This means that significant scrutiny companies will keep only 25% of their cost outperformance but bear 75% of cost underperformance.

To set efficient cost baselines we will use comparative assessment to form a view of efficiency: For the majority of companies' costs this will mean econometric models for cost benchmarking, plus a separate assessment of some other costs such as components of enhancement expenditure and business rates.

Our efficient cost baselines will be informed not only by our assessment of the sector, but also by information from other sectors and the wider economy. We will allow companies to make well-evidenced representations in support of adjustments to our cost baselines. We will have a high evidential bar for accepting cost adjustment claims made by companies. But we will make the adjustment process more symmetrical – adjustments will also be based on our own analysis – to ensure that they do not only increase cost allowances but also reduce them where appropriate.

We see significant scope for greater use of markets for water resources, bioresources, eco-services and direct procurement of large infrastructure projects to improve efficiency and improve resilience of services.

Slide 6

Cost of capital				
Component	Nominal	Real (CPIH 2%)	Real (RPI 3%)	Range (real RPI)
Cost of equity	7.13%	5.03%	4.01%	3.41% to 4.69%
Cost of debt	4.36%	2.32%	1.33%	1.07% to 1.55%
Gearing	60%	60%	60%	60%
Appointee cost of capital	5.47%	3.40%	2.40%	2.01% to 2.81%
Retail margin deduction	0.10%	0.10%	0.10%	0.10%
Wholesale cost of capital	5.37%	3.30%	2.30%	1.91% to 2.71%
<p>From the range of evidence, we consider the more-tightly bound plausible range for the Appointee cost of capital is 2.2% to 2.6% on a real RPI basis</p>				
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Moving on to the cost of capital. So the cost of capital is one of the key variables in this price review. Set it too high and bills may be higher than than customers need to pay, company profits may be seen as excessive, and the legitimacy of the sector may be called into question. Set it too low and companies' ability to raise the finance they need to carry out their functions may be put at risk with a resulting impact on services to customers.

We said in July that we would set out our initial view of the cost of capital, and that it we were expecting that to start with the '2'. And, as you will have seen, that initial view of the cost of capital is on an RPI real basis is 2.4%, which compares with 3.7% at PR14. Our view of the WACC is unpinned by a real, RPI based cost of equity of 4.0% and a cost of debt of 1.3% and gearing at 60%. Of course, as we are transitioning to CPIH we will also state a CPIH based WACC, which is 3.4%. And all things being equal, this amounts to around £15-£25 off customers' bills. Our view of cost of capital underpinned by a long-term view of RPI of three percent and of CPIH at two percent.

This is higher than the RPI assumption that underpinned the PR14 cost of capital and higher than the RPI range that underpinned the

cost of equity range we stated in July, both of which were 2.8%, and so you should consider our WACC within that context. Our initial view cost of capital of 2.4% is consistent with the range of expectations we have seen published by market commentators, including city analysts and a rating agency. And it's based on evidence which show that both the cost of equity and debt are lower than they were in 2014. In the past, regulators have tended take both historical returns, and forward-looking evidence into account, with more weight placed on historical returns.

As set out in our July consultation, we consider there is good reason to expect that required returns will be lower for the period to 2025.

We commissioned further work from PwC and a new report from Europe Economics on the cost of capital. Both reports confirmed that over-dependence on long run historical returns are likely to overstate expected total market returns for 2020-25.

We have chosen a point estimate at the upper end of the PwC range, which reflects evidence forward looking evidence of expected returns as well academic literature and market evidence.

Our approach to the cost of debt follows extensive consultation. As we set out in our July consultation we will take separate approaches for embedded and new debt.

We will set a fixed allowance for embedded debt, drawing on both benchmark data and debt instruments issued by companies. The evidence shows that companies in this sector outperform market benchmark data. So our early view is based on the median cost of debt for the sector. We recognise that the actual cost of embedded debt varies between companies, and as a result they may under- or over-perform compared to our allowance depending on their financing arrangements. It is our long-held view that investors should bear this risk, not customers.

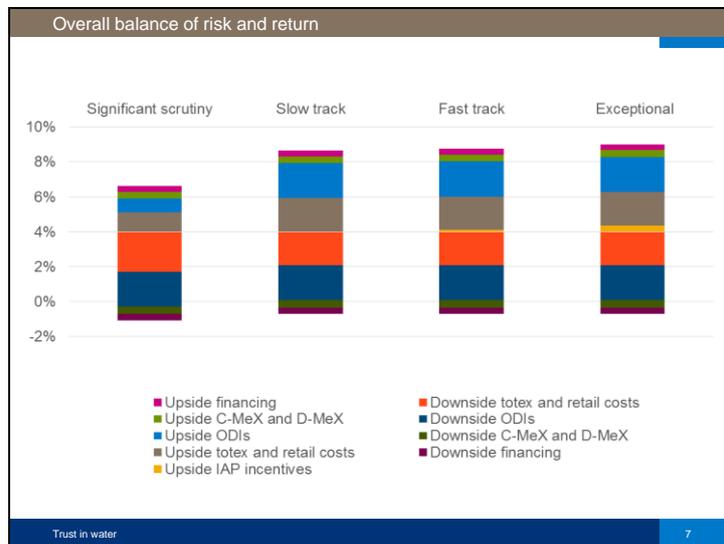
We will index the cost of new debt by reference to the iBoxx indices for non-financial companies with a tenor of ten or more years, with an end of period reconciliation adjustment. We apply a downward adjustment of 15bps to reflect evidence that companies typically outperform the market benchmark. In addition, we allow an adjustment of 10bps for issuance and liquidity costs. We will make an inflation adjustment as part of the end of period reconciliation consistent with our long-term CPIH assumption of 2%. We consider this is the approach that best satisfies all of our duties, protecting customers by removing the forecast error risk premium, but also protecting companies where there is an increase in the market cost of debt.

We will only consider company-specific adjustments to the cost of debt where there is evidence that cost is reasonable and that there benefits to customers from allowing the uplift and there is customer support.

Efficient companies should be able to raise finance on reasonable terms. Each company will be required to submit a financeable business plan with board assurance that its plan is financeable on both notional and actual capital structures. We interpret our financing functions duty to apply to the ring-fenced activities of the appointee and so we propose to assess financeability at appointee level by reference to the notional capital structure that underpins the cost of capital. Companies have a number of options to address financeability constraints that arise under a notional financing structure and we'll be looking for evidence of customer support where companies take steps to address such constraints.

And to reiterate the choice of the actual capital structure and financing is a matter for companies and their shareholders, and companies should not expect customers to bear the cost of addressing any financing constraints resulting from the actual financing structure or an inefficient financing strategy.

Slide 7



Moving on to the overall balance of risk and return In the responses to our consultation, some companies and investors raised concerns that the risk and return package was asymmetrically skewed.

As a result, as I've explained we revisited the risk and return package and revised the financial incentives for the initial assessment of business plans to reflect the initial risk in the business plan, we have changed the total expenditure cost sharing rates and we have clarified the performance commitment benchmark for company will be based on upper quartile in each year.

There will be scope for outperformance where companies deliver on things that matter to customers. The overall impact on risk and return from our incentives can be seen in the effect on RoRE in the slide.

For ODIs, we have used a stylised, illustrative RoRE example of  $\pm 2\%$  – the midpoint of the indicative range. It is unlikely that companies will achieve upper quartile performance across all ODIs

for the full duration of the price control and so achieve the full 3% upside stated in our guidance.

Totex performance is based on the impact of 10% over or underspend over the price control period for each of the price controls.

For the network plus and water resources price controls, the costs of out- and under-performance are shared between companies and customers based on the cost sharing rates. We assume companies bear 100% of the impact of out- or under-performance for the retail controls and bioresources controls.

The difference in cost sharing rates is the main difference between the RoRE of those companies in the significant scrutiny category and those in the other categories.

The difference between slow-track, fast-track and exceptional companies is due the additional incentives for fast-track and exception plans. It should be noted that fast-track and exceptional companies are likely to achieve higher RoRE through outturn performance on totex and ODIs, though this is not reflected in the chart.

All of this this shows that the potential to earn higher returns for high performance has increased since PR14 while the downside for poor performance has increased too, reflecting a sharpening of the incentives. The next slide sets out the timetable.

Slide 8

Next steps	
<b>2017</b>	
<b>13 December</b>	Ofwat publishes PR19 final methodology.
<b>2018</b>	
<b>3 May</b>	Companies submit: <ul style="list-style-type: none"><li>• definitions of their performance commitments; and</li><li>• information on their expected cost adjustment claims.</li></ul> Publish further revised business plan tables and financial model (if required).
<b>3 September</b>	Companies submit business plans to Ofwat.
<b>September / October</b>	Companies present their business plans to Ofwat Executive / Board. We expect any presentations to take place between 24 September 2018 and 5 October 2018.
<b>2019</b>	
<b>late January</b>	Ofwat publishes: <ul style="list-style-type: none"><li>• initial assessment of business plans; and</li><li>• 2018 company monitoring framework assessment.</li></ul>
<b>March/April</b>	Ofwat publishes early draft determinations (exceptional and fast track plans).
<b>April</b>	Companies submit revisions to business plans (significant scrutiny and slow track).
<b>July</b>	Ofwat publishes draft determinations (slow track and significant scrutiny).
<b>December</b>	Ofwat publishes final determinations.

It's now over to companies to submit to us, by 3 September 2018, high-quality, ambitious and innovative business plans that deliver more of what matters to customers.

In the meantime, we will be gearing up for the price review proper. The leadership team of Aileen Armstrong, John Russell and me is already firmly in place. I'll be focusing on policy, Aileen on engagement and John on programme. And on delivery, we expect to appoint our delivery partner for the price review in the spring, and begin on-boarding them straight away..

At a time of increasing scrutiny and facing long term challenges, we have developed a methodology which enables and challenges the sector to step up and deliver now and for the long term. There are significant opportunities in the methodology for companies who are willing to challenge themselves and shift the frontier for cost and service. For companies, who don't, we will step in and ensure that customers are protected.

So thank you. I'm joined by John Russell and Aileen Armstrong and I'll now hand it back to the operator to take any questions that you may have on the methodology statements. Thank you.

Slide 9



Operator: That's perfect. Thank you very much, sir. So just a gentle reminder, if you wish to ask your question on the telephone, please press star and one on your telephone keypad and wait for your name to be announced.

Alternatively, you can submit questions via the webcast. Now, I think we do have a question on the web and we also have a couple on the phone. Would you like to go to the phone first?

David Black: Sure.

Operator: OK. Thank you. So from Macquarie, we have a question from the line of Dominic Nash. And your line is open.

Dominic Nash: Hi, guys. Thank you for that. I've got two questions, please, if I may. So the first one is unsurprisingly on the cost of capital. You write in this document that this is still sort of an initial view cost of capital and whilst it is understandable is that the cost of debt may well swing between now and 2019.

Is the cost of equity now actually fixed out to 2025 either the real or nominal sort of benchmark or is that liable to change as we go through the determinations?

And then the second question is you're very open upfront about the potential 15 to 25 pounds reduction in bills. That's been picked up by the press; is that a signal to the water companies as to where you would like see bills go?

Because ultimately, this is going to be down to that sort of pay as you go mechanism and financeability and all the other bits and pieces within it or are you actually giving them a very powerful signal that that is what you would like to see in the business plan submission?

David Black: OK. Thank you, Dominic. The first question on the cost of equity, we will revisit both the cost of equity and the cost of debt at the time of the draft and the final determinations for 2019.

I think you're right that some parameters of the cost of equity-like total market returns, the evidence, is you know, by it's nature not that prone to being updated inside the 18 months that we have before we set the cost of capital.

But there will be I'm sure new evidence to take into account of and so we'll look at that. I think that we've got other parameters like the equity betas, where there will be extensive new data available. You will see in the methodology statement that we viewed primarily a two-year range historical range - on equity betas.

So by final determinations, there will be quite a lot of new data. There will be regulatory decisions by other regulators and so we'll be looking at those as well. There are some reasons why the cost of equity might change by PR19 as well as the cost of debt.

In terms of customer bills, the 15 to 25 pounds is simply our calculation of the impact of the reduction in the cost of capital.

We are — it's very much up to the companies to look at the efficiency gains and look at the benefits from the WACC reduction and to look at other reasons bill will be falling in PR19.

There will be other reasons why bills may be going down in PR19 but it is up to companies to engage with their customers on how they wish to use the headroom in terms of things like resilience or in terms of assistance for customers struggling to pay or bill reductions for all customers.

The point I would like to make is the great thing about PR19 is there is considerable headroom there it is not just the WACC reduction. We are also expecting a step up in cost efficiency as well; so there is - as you know - quite a significant headroom including scope for bill reductions and we look forward to business plans and how companies plan to make use of this headroom in their customers' interests.

Dominic Nash: Is there — is there not — so for a follow-up on that, is there not a risk that you're putting an expectation into the market and sort of the journalists and the politicians that this is the level of price cut expected and if doesn't get delivered, then you're open to some sort of, sort of, pushback here?

David Black: We have been very clear what the calculation is based on and we're also very clear that the individual circumstances of the company and their customers will need to drive the actual bill changes in any one particular company.

Dominic Nash: Great. Thank you.

Operator: Thank you very much indeed, sir. You're next telephone question comes from the line of Deepa Venkateswaran. And your line is now open.

Deepa Venkateswaran: Thank you very much. My question has been partially answered. So I — and it is on the WACC. It has been partially answered but I probably have a follow-up question on that. So just looking at the cost of equity so that maybe the beta can get updated but likely the TMR and risk-free rate or the equity risk premium stays the same.

In terms of cost of debt embedded, do you see that changing significantly, I guess new debt could change but that it will be indexed, so just want to deal you on the cost of debt?

And secondly, in terms of timing, I guess the next update is going to be in April/March of '19 along with the enhanced or the fast-tracked dominations.

David Black: So yes, in terms of the cost of embedded debt, we will have some new information by PR19. First off, we'll get the company business plans and that will have updated information on their embedded cost of debt.

We have made some assumptions about company refinancing in the period — the rest of the period to 2020. So there will be some new information; it may not change the embedded cost of debt but at least there will be new information.

And in terms of when we update, we'll need to decide as part of the PR19 process as to when we make the revised cost of capital estimation in terms of whether we leave it to the draft determinations in July and what weight we put on the update for the final determinations.

I'd note that for PR14, we focused most of our attention on the on the final determinations, I think given where we are now it will make sense to provide an update for the July draft determinations as well as the final given the timeframe that we've got now. We'll decide that in 2019.

Deepa Venkateswaran: Thank you.

Operator: Thank you very much indeed. And now your next question comes from the line of Lakis Athanasiou. And your line is now open.

Lakis Athanasiou: Hi there, guys.

David Black: Hi Lakis.

Lakis Athanasiou: Hi. My question is on credit metrics. Calculating for the notional company who's just meeting your allowed return and is not outperforming or underperforming. I get that the Moody's adjusted interest cover is about just 1.4 so just within BAA1 range. And if they are underperforming, they are outside of it, below that.

Second, on the new S&P FFO to debt that's eight percent which is way — which is below the nine percent threshold for triple B plus.

Now, for S&P, you can't adjust for pay as you go ratio shifts and I get that you would need a six percent shift compared to the natural opex split which adds about four percent to bills to actually meet the nine percent.

So it seems to me, it's one of two things; you really have embedded for the notional structure of the company who is delivering on actual stringent ODI and totex targets will either have to embed in a six percent pay as you go shift or be satisfied with the triple B and for companies underperforming, you probably push them into a triple B range?

So I mean do you think that's safe to actually start off with an implicit assumption that you need pay as you go ratio shifts and or a move into the triple B range?

David Black: Thanks Lakis. So, you know, we've asked as part of the business plan process companies provide assurance around their plans both on a notional and actual basis in terms of financeability. We think the evidence they provide is up to them. We have not set out any views about target ratios. We have provided the financial model which they can use to calculate the ratios.

We have undertaken modeling of our own based on information that we have before business plans arrive in terms of the impact on ratios from our cost of capital and we're satisfied that the notional company will be financeable based on the cost of capital that we have set.

Until we see that the business plans themselves and the information that provided in them it probably difficult for me to say much more than that in response to your comments.

(Lakis Athanasiou): But you don't need to look at the business plans, your notional company for a company delivering the allowed return you're allowing will end up even in triple B territory or it will have to make pay as you go ratio shifts of six percent.

It's one or the other, you know, there are no ifs and buts, there are no maybes, there's no need to look at the business plans. Your notional company will deliver that.

So I'm just saying is that a safe thing to do, we know that from now, we don't need to look at the business plan, you've given us enough information to make those calculations and you seem to be saying, we need to embed in pay as you go shift or be satisfied with triple B.

David Black: We satisfied that the cost of capital we have set is financeable and that's all what I'm going to say at this point. I don't think there's any point in terms of saying that it's going to mean this or that pay as you go shift.

In fact, the ratios will depend on the company's business plan and will depend on the RCV growth and will depend on their own structures. So we will judge that when companies submit their business plans. I am very confident that on a notional company basis that companies are financeable. Thank you.

Operator: Thank you very much indeed. Now, your next question from HSBC, comes from the line of Verity Mitchell. And your line is now open, ma'am.

Valerie Mitchell: Hi, good afternoon, everybody. I'm just going to — also going to go back to a question on the embedded debt. And two things: firstly, if you would like to talk through your change in gearing assumption which is new. And also, why you think it's appropriate to apply

downward adjustments to the debt indices on the basis that you say that companies, I mean all companies, typically outperform the market benchmark?

It sounds like you're picking a market-related benchmark and then applying an additional discount so those two things would be very helpful. Thank you.

David Black: Sure. So in terms of the change in gearing as a part of setting the notional capital structure, we need to set out our view of the gearing. In our July methodology, we said it would not be any higher than the 62.5 percent we set in PR14.

We're think an appropriate level is 60 percent; that's a small downwards adjustment from PR14; so that's on the basis of both what we see in terms of the sector and there is some market-wide evidence of reductions in gearing. There's also some evidence of companies moving to shorter-term debt. But also, what we see in wider markets about debt but secondly, in terms of our methodology of putting more focus on markets and potentially an increase in the volatility of returns or revenues over time. And therefore, we think it appropriate to make that small downward adjustment in gearing.

In terms of the outperformance on debt in PR14, we also made a 15 basis points adjustment to new debt and there is evidence that the sector outperforms.

My understanding is that over the last eight years the sector has outperformed by around 55 basis points on debt so there is evidence that the sector is financing itself cheaper than market benchmarks.

We think it is appropriate that the customer should only pay the efficient cost of debt and clearly if there is evidence that companies are regularly outperforming these benchmarks it's appropriate to make an adjustment.

In terms of the forward looking adjustment for new debt that does require making an assumption and we've taken into account that interest rates are lower and then we might expect that the absolute level of outperformance to be lower and that's how we derived at the 15 basis points for the new debt. On the embedded debt it is very clear that the evidence is that the cost is lower than the benchmarks and therefore we have taken that into account in our analysis.

Verity Mitchell: OK. Thanks. Here's a quick follow-up which is why you picked mid-2017 yields in terms of repayment, you can take a range of time given that companies have very different refinancing profiles?

David Black: So in terms of deriving the cost of embedded debt?

Verity Mitchell: Yes.

David Black: So I think that is in terms of the most recent available information that we have and that's why we've used it in terms of taking our cost of capital for our initial review.

Verity Mitchell: OK. Just a spot basis, not any range of — given that most companies don't necessarily?

David Black: So we're taken into account the fact these companies are financing on a long-term basis so the fact that the embedded debt is, you know, is based on a rolling average of that debt and is looking out in terms of debt of 10 to 20 years maturity.

Verity Mitchell: Thanks.

David Black: But it is trying to derive what the relevant cost is in today's terms. Thank you.

Verity Mitchell: Thank you.

Operator: Thank you very much indeed, ma'am. Now, your next question from Deutsche Bank comes from the line of Duncan Scott. And your line is now open, sir.

James Brand: Oh, hello. Actually, it's James Brand from Deutsche Bank, sorry, but the line is not great because I'm traveling today.

Operator: I understand. Sir, you go ahead. Thank you.

James Brand: Yes, sorry. I just have a question on the ODIs, just to clarify, you're putting in place a number of common ODIs and the upside and downside range on ODIs is a fairly important part of your differentiation between good performing companies and bad performing companies.

But there's also a common in the document that seems just that customer challenges will have a pretty important role in terms of determining, you know, whether companies will have upside and downside ODIs or just downside ODIs.

So I wanted just to clarify whether the common ODIs that you're putting in place whether you're going to be prescriptive in terms of the magnitude of upside and downside.

And if not, whether that was reasonable given there were such an important part of the ability of allowing good companies to earn good returns whether you shouldn't be more prescriptive. Thanks.

David Black: So in terms of outcome performance commitments, we do want companies to engage with their customers on their proposed outcome delivery incentives for each of the outperformance commitments. And we expect companies to provide evidence around their customer views on their proposed ODI outperformance payments and penalties.

The customer challenge groups have a role in terms of providing assurance around the company engagement with customers rather than on providing views on the level of rewards themselves. We

have set out our guidance in terms of our expectations around what we think a sufficient incentive would be to align a company's incentives with their customers.

But we do think it's important that any outcome delivery incentives are based on evidence around customer views. We have made it clear that there's a wide range of evidence to draw on in terms of understanding customer preferences and priorities and we would expect companies to use that in providing their views to us and that applies both to the common and to the bespoke outcome performance commitments.

So we are expecting a company to take account of customer views and to base the outcome delivery incentives on the evidence they have around customer preferences. Because these do feed through ultimately to customer bills it's very important that there is customer support for any proposals to provide an outperformance payment for any performance improvement. Thank you.

(James Brand): OK. Thank you.

Operator: Thank you very much indeed, sir. And now from the Royal Bank of Canada, you have a question from the line of Maurice Choy. And your line is now open, sir.

(Maurice Choy): Thank you. Good afternoon. Two questions from me. The first question is on the cost of equity, and you mentioned that it is subject to change pending market evidence. Given that I guess the first inclination of any revision will be in March 2019.

I just want to know whether if you would also consider, if I guess, given that Brexit is happening, it's meant to complete then or even the threat of nationalisation, how does that feed into this view of cost of equity?

And then second point is also very related in terms of cost of debt, given that if we — if we do believe that the Brexit process is going to go through and complete, the removal of EIB which is obviously one of the cheapest forms of debt to the market right now and will obviously affect the financing performance of every company that has access to that. So how do you then justify that a 15bps discount should be implemented or even any discount should be implemented? Thank you.

David Black: OK. So in terms of cost of equity, I think you are right that by the time we get to the final determinations which should have some evidence of the impact of Brexit if there is any in terms of on both the market cost of debt and cost of equity and we will obviously be able to take that into account; I'm not going to speculate as to what it might be.

But obviously, markets are able to take account of what we're aware of at the present point of time and we've made our view on the initial cost of capital on the current evidence that's available.

In terms of cost of debt and the EIB, it's true that the EIB is an important source of financing, I think it's about 10 percent of the debt in the sector.

But that does mean that ninety percent of the debt is funded from elsewhere and it's very clear that the financing advantages that the sector has over indices is not just based on EIB funding; it's based on a broader range of outperformance across the forms of debt that the sector has.

So we do think it's relevant and appropriate to take that into account for PR19. Thank you. Should we just do one check, operator, on anymore calls on the line.

Operator: At this point, there are no further telephone questions, sir.

David Black: OK. Yes, can we take some — so we'll take some of the web based questions? So the first one was around, the embedded cost of debt

—so yes, that will be the updated for draft determinations and we have already discussed that.

Second question from Iain Turner of Exane BNP Paribas was around, philosophically, how you can have a negative real risk free rate.

I'm not going to answer the philosophical question. I'm going to say it's what you observe in the market and it's what we have observed actually over a number of years now.

And just like the price of tomatoes, if it's negative in the market that's the price of tomatoes and so if the risk free rate is negative that is the underpinning so we will take that into account — so we do look at the evidence and that's the evidence that is in front of us.

The third question was in relation to - what was the process to appoint Europe Economics who are one of our advisors on the cost of capital. So that was, as with all Ofwat processes, an open and contestable process, there were a number of bidders and Europe Economics was selected.

We also had a revised report from PwC who were our advisors from the earlier stage of the draft methodology so we have advice from two sets of consultants in that regard so that answers that question.

Next question, further question from Toby Richardson on how would you expect companies to reconcile differences between the upper quartile performance commitments and feedback from customer engagement, for example, where it was clear that there is a cost of meeting upper quartile performance commitments but customers don't want to pay?

And so I think we need to be clear about two distinctions. One is about the stretching level of performance commitments and so that is based on a range of evidence including evidence of forward looking upper quartile performance in the sector; expected performance.

So that doesn't require customers to pay more - that's the decision in terms of our cost allowances. The only thing that matters for companies is that if they don't deliver that, they will incur a penalty and so therefore their customers will pay less.

So there isn't any additional cost for customers from ratcheting up performance commitments; rather the reverse - the cost to customers is lower.

But it is important that that's why the outcome delivery incentive performance payments and penalties are calibrated on customer views – because that feeds into a company's decisions about how far and how fast they go to pursue these performance commitments.

Finally, we have a question about how we protect customers from higher than expected outperformance payments and do you have any concern about Severn Trent's sewer flooding performance where on one ODI the company appears to have captured 95 percent of all its ODI payments?

So this I think there are two elements that are worth discussing. One is around caps on outperformance payments and penalties. As I said in PR14, we had a cap of two percent on return of regulatory equity.

We are removing that cap and we've extended our view in terms of the expected range of performance to plus or minus one to three percent.

The reason why we're comfortable in removing the cap is that because unlike the PR14, we will have much better comparative information around what stretching benchmarks look like. Whereas performance commitments were new at PR14 and there was little data to rely on when we were setting the base commitments and hence the need for a safeguard cap.

However, we do think there is an issue about unexpected events impacting upon potential outperformance payments and penalties and so we are asking companies to make it clear that they understand their tail distribution risks and to explain how they're going to mitigate risks to customers.

I would also note that individual caps and collars may still be applicable to outcome delivery incentives particularly where there are large incentives relating to a single performance commitment.

But we do think that caps and collars themselves have the potential to discourage companies from going further where it would be very beneficial for customers in terms of pushing frontier performance, so I think it's right to remove them.

Thank you. I think that's all the questions we have on the screen. So if there are no further questions, I'll be going to propose to close the call Operator.

Operator: Of course, thank you very much indeed, sir. And with many thanks to all our speakers today. That does conclude this webcast. Thank you all for participating and you may now disconnect. Please stay on the line for me, sir.

David Black: Thank you.

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