Ofwat

City briefing: Water 2020: our regulatory approach for water and wastewater services in England and Wales
Cathryn Ross, Chief Executive
David Black, Senior Director, Water 2020
25 May 2016

Operator: Good afternoon, ladies and gentlemen. Thank you for standing by, and welcome to the Ofwat City Briefing conference call.

At this time, all participants are in a listen-only mode. There will be a presentation followed by a question and answer session, during which if you wish to ask a question, you will need to press star and one on your telephone keypad. On the web, you can do so on the Q&A box on the bottom left-hand corner of your screen. I must advise you that this conference is being recorded today, Wednesday, the 25th of May, 2016.

I will now hand this call over to your first speaker today, Cathryn Ross. Please go ahead, madam.

Cathryn Ross: Thanks very much, Operator, and welcome, everybody, to our City Briefing call. Our topic today is the document that we published earlier this morning on our Water 2020 policy framework. We have up to one hour on the call, and I'm here with David Black, who's our Senior Director of Water 2020.

We're going to talk for around 30 minutes, and we'll take some questions at the end.

It is challenging to deliver better outcomes for customers

I'm going to start by reminding you a little bit about why we are doing what we're doing and remind you we have a vision of trust and confidence in water and waste water services – a vision which is shared by the sector that we regulate, and I hope also many of you too, because the trust and confidence of customers and society is vital for its continued investability. Everything that we do is designed to help the sector to get further towards that vision, and to further our statutory duties.

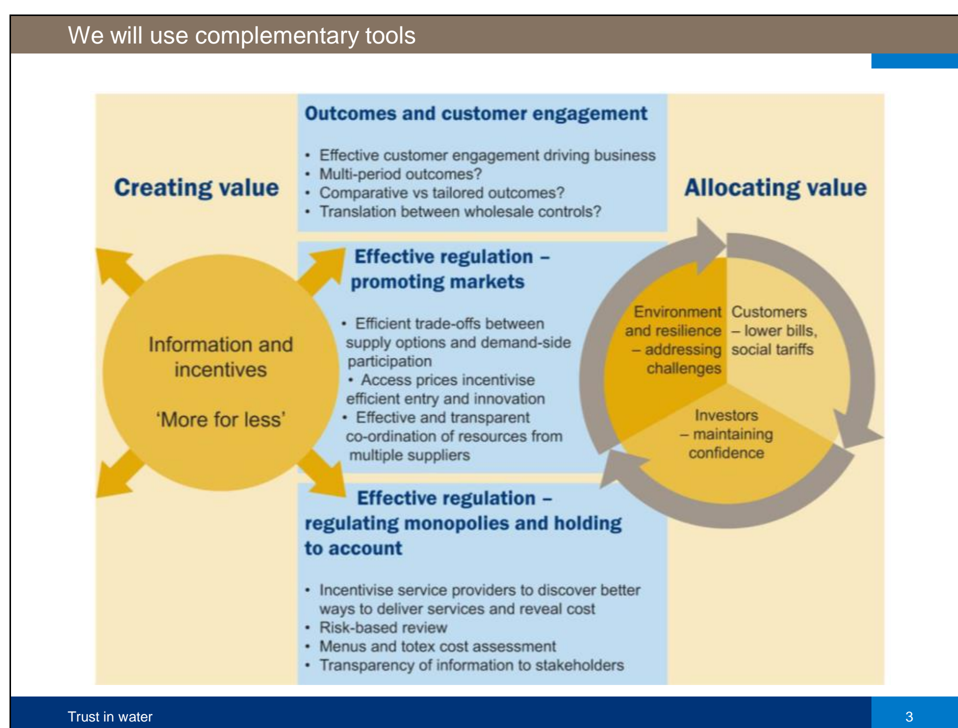
Back in December, we said that there was an increasing risk that the future could be one that is characterised by low levels of legitimacy and disengaged customers; where precious resources are not used as efficiently as they might be - putting greater pressure on the environment; and where opportunities to tackle affordability and deliver more for less are not being seized, resulting in higher bills to customers than they otherwise could have been. And that risk is not just one that Ofwat is pointing out, it has also been highlighted by companies too - if you haven't seen the really excellent work by Anglian, Yorkshire, and United Utilities on this in our marketplace for ideas, I strongly suggest you take a look.

So - as we said - in the face of that risk, we as the regulator need to look hard at how we regulate and make sure that our regulation is informing, enabling, and

incentivising the sector to meet the challenges it faces and stave off that risk of declining legitimacy.

And back in December, we said pretty clearly that we thought we needed to make some changes. In fact, we reached the conclusion that no change was not an option and that we needed to start making changes early - in PR19 - to enable us to adopt a series of progressive developments, a managed transition, and avoid the need of making big bang changes later on.

We will use complementary tools



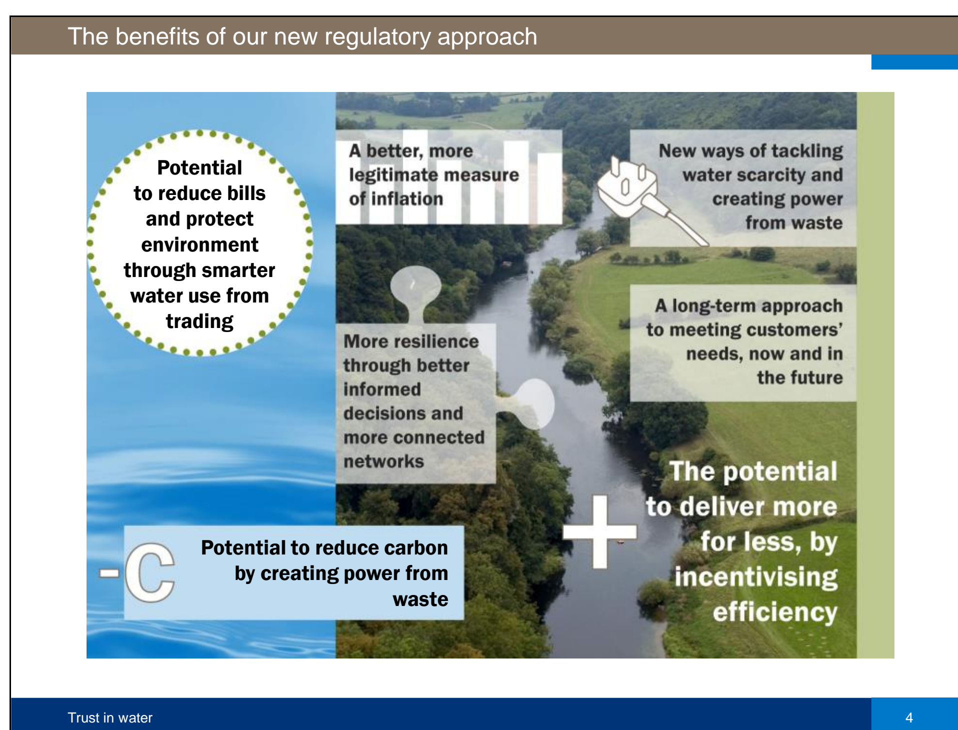
So in our December consultation, we set out a targeted package of proposed reforms for the regulatory framework that would inform, enable, and incentivise companies and other stakeholders to tackle these agreed challenges the sector faces.

Our design of the future regulatory framework addresses both the role of markets and the role of regulation. We see these as complementary. Value creation is facilitated in our framework, both by the approach to regulation of monopolies, such as through our outcomes and totex approach we introduced in PR14, and by

enabling a greater role for markets, focused particularly on where we see the benefit-cost ratio is most attractive.

And even though I'm talking here about value creation, which I recognise isn't what everybody on this call will have bought into the sector for, if the companies we regulate don't create value by becoming more efficient and by allocating scarce resources to where they're valued most, and by innovating, the sector will simply not be able to continue to deliver resilient services at an affordable price, its legitimacy will be eroded, and so ultimately will its investability.

The benefits of our new regulatory approach



So how are we doing against what we said we'd deliver? Well today's decision document and the impact assessment that we're publishing alongside it, gives us a lot of confidence.

First, we're really confident that we're on track with the timetable that we set ourselves. Crucially to set out our methodology for PR19 in the middle of 2017, in good time before the review kicks off, and in time to inform business plans. As we took stock of the PR14 process, we heard this request loud and clear, we agree with it, and we're delivering.

Second, and this is a really big point, the further work we've done since December to examine and test our proposals has provided a very firm evidence base. We're very confident indeed that the package of design changes we published today are demonstrably in the public interest.

Let me demonstrate this. We've quantified, where we can, the costs and benefits from our design changes compared to continuing with the existing framework. Looking across sludge, water resources, and direct procurement, we see net benefits of between 1.3 billion, and 3.4 billion pounds. Using the midpoint, our package of design changes has a benefit to cost ratio of around 20 to 1.

The process that we followed to get us to this point has been just as vital. Engaging early, and having really constructive engagement, has put us in a great place to move on to the next phase. We've got good momentum now, and we're changing gears.

We will still work in a collaborative way as we enter the next phase of our work - which includes developing and securing the licence modifications that we need to implement these changes. In particular, we're keen to work with companies who can quickly accept the policy package that we've put out today to develop the licence modifications that will enable us to implement it in PR19. We envisage a co-creation phase to develop modifications before we go to formal consultation in Q4 this year. I will come back to this point again at the end.

So I know you'll be itching to hear some of the substance, but before I get into some of that, I want to remind you of one of the things I remember saying very clearly at our City Briefing back in December, which was that our proposals at that stage were the result of a co-creative approach. So that given that, it shouldn't come as a huge surprise that the headlines of our policy package remain broadly the same as in December.

Summary of decisions

Summary of decisions

Area	Main decisions	Key changes since December
Customer Engagement	• Build on PR14 approach, with a further step change with an even greater emphasis on listening to customers, especially about long term issues • PR19 risk based review to include strong focus on longer term context of business plans	Clarification on role, scope and constitution of customer challenge groups
RPI/CPI	• Secure long term legitimacy of price controls by move away from RPI indexation of price controls to CPI/CPIH • Customer bills will be indexed by CPI (or CPIH) • We will transition the Regulatory capital value (RCV) indexation to CPI/(H). 50% of the RCV will be indexed to RPI at the start of the PR19 price control (ie 1 April 2020) and the rest, including all new investment will be linked to CPI/(H) • Transition will be NPV neutral for notional company with true-up mechanism for differences between indices	Principles for transition of RCV beyond 2025 to provide clarity on how we will decide RCV is to be indexed in future price controls
Water resources and sludge	• Information platforms to enable third party provision of water resources and sludge services • Separate binding price controls to help enable and incentivise companies to pursue the best solutions, maximising benefits for customers, the environment and the companies themselves • Access pricing to incentivise new resources in areas with demand/supply imbalance	Flexible approach to allocation of RCV to water resource control Modified information requirements to reduce compliance costs and enable third party data aggregation
Direct procurement for customers	• For suitable high value projects (>~£100m whole life totex) strongly encourage companies to consider tendering both the construction and finance and, where appropriate, operation of new assets	Strong process incentives to consider this from our risk based review at PR19
In-period incentives	• Licence change so that all companies will consider having incentives for performance commitments in period (we are keeping open the option of an in-period adjustment for debt indexation for now)	Narrow scope to performance incentives and exclude other issues such as cost incentives

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We've retained our commitment to protecting pre-2020 investments. Our further work has confirmed that a specific mechanism to guarantee pre-2020 RCV is not required for PR19, and in fact introducing one at this stage could deliver perverse consequences. But if it's needed, we will return to delivering on our policy of protecting the pre-2020 RCV at PR24.

Beyond that, we remain committed to ongoing two-way customer engagement, using a diverse, robust, and proportionate evidence base. We remain committed to opening up water trading, so that markets can help deliver efficient incremental new water resources. We remain committed to opening up markets for sludge – bio resources - treatment, transportation, and disposal. And we remain committed to transitioning from RPI to CPI, or CPIH, for indexation of revenues and RCV, starting the transition in PR19 by moving 50 percent of the RCV at that point onto CPI or CPIH indexation.

But we have made changes, and the consultation responses have fed into our policy development, and identified some better mechanisms for achieving our goals.

Now it's easy to dive down into the detail, and miss some of the underlying themes, so let me draw these out for you.

Our changes are actually bigger than they may seem at first glance, and this is because there is a coherence to them, and I want to draw out some examples to support these themes across the different elements of our design package. There are three themes I want to go through.

First, there's now lower cost and less complexity, and let me give you one example of that. We've simplified the information disclosure requirements for sludge. We'll be asking for just quantity and demand data, and allowing companies more time to develop accurate cost data. And here's another example, out goes our original proposal for a more expensive, third-party run database, and in comes a simplified market development platform, based on incumbents making data available on supply-demand deficits and water resource costs in a consistent format.

Theme number two, we've opted to put more responsibilities on companies. For example, we've dropped our proposal for a full bid assessment framework. We're now going to leave it to market participants to collaborate on developing guidelines for the purpose of facilitating commercial discussions as the sludge market develops.

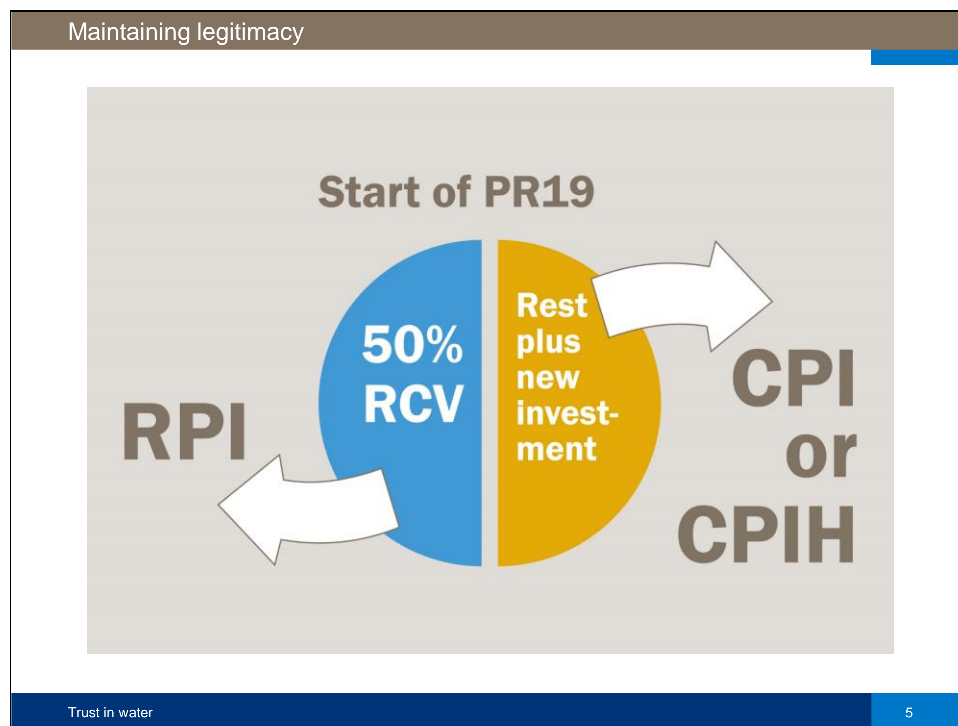
And theme number three, our changes mean that the package is more proportionate, practical, and workable - here I'd point you to the idea that as current charges implicitly attribute some of the RCV to water resources, that seems a good starting place for each company to develop and justify its own appropriate allocation for PR19, which we can then review.

So I'm going to hand over to David now, who's going to give you a little bit more detail on our decisions across indexation, bio-resources, water resources, and direct procurement and expand a little on the rationale behind them.

I'll then come back in to conclude with next steps, after which we'll take your questions. David.

David Black: Thank you, Cathryn. As Cathryn said, I'll provide an overview of our key decisions, and what's changed since our December proposals. Let me start with indexation.

Maintaining legitimacy



We will set controls so that wholesale revenues will be indexed by CPI or CPIH from April 2020. This will require an amendment to company licences.

This will be for the controls for wholesale water network plus, wholesale waste water network plus, bio-resources, and water resource price controls. This change will help secure the legitimacy of the wholesale price controls by adopting a better accepted and more frequently used measure of inflation. It will also lower the volatility of customer bills.

The Office of National Statistics is reviewing CPIH, and so we'll reach a view on whether to adopt CPI or CPIH when we publish our 2019 price review methodology statement in December 2017.

Since December, we've commissioned Oxera to assess the costs and benefits of changes to indexation. They concluded that “there is no evidence that financing costs would go up for the industry if a switch to a different inflation statistic is implemented in full.” That is they considered if we moved indexation of prices and the indexation of RCV away from RPI to CPI or CPIH, there would be no impact on financing costs.

The reason they reached this conclusion was that switching to CPI or CPIH for RCV indexation benefits investors. In large part, this is due to lower enterprise value volatility, as both revenue and RCV become more stable and they're a big part of overall value.

The switch to CPI or CPIH would also increase the match with nominal debt. Oxera found these benefits outweighed any potential costs from the increase in mismatch between RCV growth and existing RPI-indexed debt. Most companies have more nominal than RPI-indexed debt, and even in cases with high proportions of RPI-indexed debt, Oxera found the impact on firm volatility is modest. Moody’s has also noted that a change to CPI or CPIH could improve the link between revenues and total interest expense and thereby lower the volatility of FFO and other earnings measures. Companies will also retain the option to use Pay-As-You-Go and RCV run-off financial levers to help manage any transition.

We recognise investor concerns about the perceptions of risk associated with a rapid transition. We also note the concerns about the impact on bills from an immediate switch before any adjustment via Pay-As-You-Go and RCV run-off rates. We therefore have concluded that the transition should begin with 50 percent of the April 2020 RCV being linked to RPI. The rest of the RCV, including all additions to the RCV, will be indexed by CPI or CPIH. This is consistent with the preferred option we set out in December.

We also believe that using two inflation measures for RCV indexation and revenue is not ideal, and so we will transition to our preferred measure as fast as practicable after PR19. The transition based on 50% of the 2020 RCV uses our PR14 notional financing assumptions with 62.5 percent of financing from debt, and 75 percent of that debt being treated as embedded debt, or debt that wasn't refinanced in that price control period.

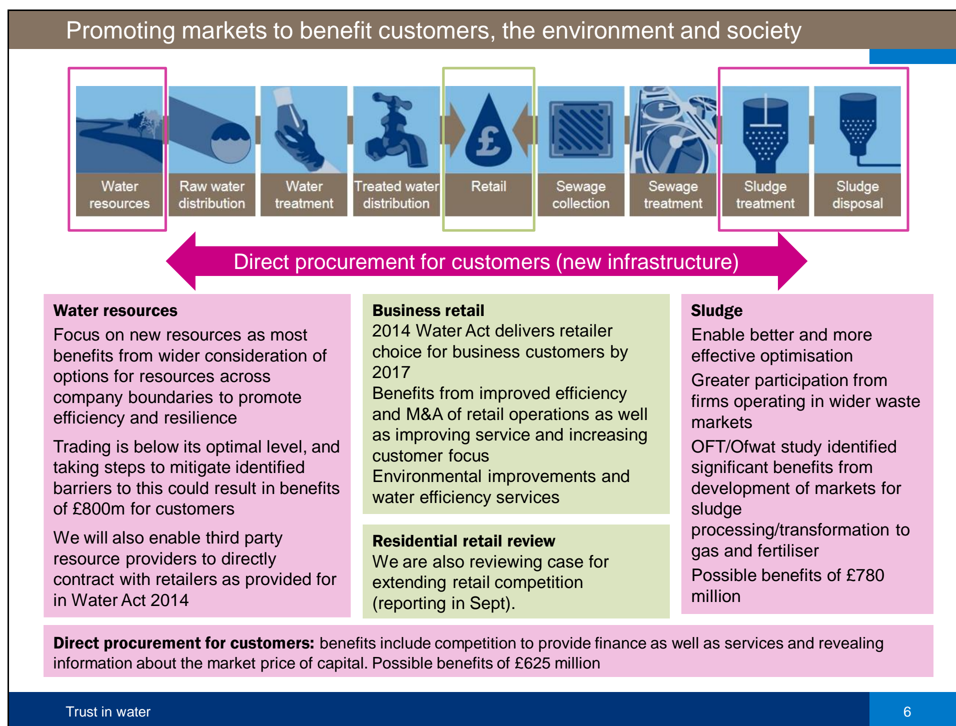
We will continue to take a view of the importance of long-term financing to the sector in our future cost of debt assessments. We also note that the transition to CPI, or CPIH, will require a forecast of the wedge between RPI and CPI, or CPIH, made for the purposes of setting price limits to determine the cost of capital for the RPI linked part of the RCV. We will carry out a reconciliation to correct for any difference between the forecast and actual wedge and since December we've published an illustrated spreadsheet model to show how this would be calculated in practice.

So what has changed since our December publication? Firstly, we've published today a set of regulatory principles that will apply to our future decisions on the steady transition from RPI to CPI or CPIH, for indexing RCV at PR24 and beyond.

We do not see it as in the interest of customers, investors or companies to embed a specific transition path to 100 percent RCV indexation at this stage. Our speed of transition principles aim to provide a helpful bridge between the need not to fetter the discretion of Ofwat to take whatever action it considers best meets our statutory duties in the future, and providing clarity and certainty about how price controls will work in the future, given the weighted average debt maturity profile in the sector is around 18 years, i.e., it spans multiple price control periods.

To further our commitment to NPV neutrality, we will also publish an RPI and CPI stripped version of the real WACC for PR19. To provide an example, we have today re-estimated the PR14 real WACC on the basis of CPI. This calculation is set out in today's document.

Promoting markets to benefit customers, the environment and society



I'll now discuss how markets can play a greater role in helping the sector address the longer term challenges it faces, to make better use of resources, and encourage innovation and optimisation across company boundaries.

Bio-resources, also known as sludge; we see significant benefits from using our regulatory framework to provide a market for sludge transport, processing, and disposal across incumbents and other organic waste companies. This should result in lower bills through more value being captured from sludge, a fall in the cost of service provision, greater resilience, and better overall environmental outcomes.

Ultimately, this change is really about encouraging efficient procurement of sludge services via the current wastewater companies. We estimate the benefits from our changes at around 800 million pounds over the next 30 years.

The key elements of our decision are to require information to be provided to enable third party providers to better enter and develop sludge markets, and also to establish a separate binding price control for bio-resources.

A separate price control will be set at the company level, run for five years, and use an average revenue control, which will use an RCV allocation on a focused basis. We're guaranteeing the pre-2020 RCV, but note that the post-2020 investment will be at risk.

We will set this price control on a standard building blocks basis, and as companies make decisions about whether to use their own in-house capabilities or to procure from third parties they face no additional risk from competition in the PR19 period.

We've decided to use an average revenue control, similar to the approach we used for the PR14 retail residential control, as we think this is the best and simplest way to incentivise companies to optimise the processing of sludge within and beyond their facilities.

The average revenue control will set an allowed amount of revenue for each unit of sludge treated, so the volume adjustment is clear and automatic, and will provide a link between the price control and the wider market. Sludge volumes will matter for wastewater companies, and clear volume information will be useful for all market participants.

We note this will mean wastewater companies will be exposed financially to variations in the volume of sludge produced in the course of sewage treatment activities in their areas of appointment, and that this risk could be non-diversifiable in the sense that it might be linked - at least in part - to the wider economic cycle. We acknowledge this may have in itself an impact on the cost of capital, but we also refer to the analysis conducted by PwC for Ofwat as part of our December proposals, whereby they considered that any impact on the cost of equity associated with the shift to the average revenue control would be broadly offset by the increase in capital intensity as a consequence of the focused RCV allocation. So overall, there need not be an impact on the cost of capital, however this is obviously a matter for the PR19 price review.

So there's a lot changed. As Cathryn mentioned, we've simplified the system information disclosure requirements for sludge to focus on the quantity and demand information, and this will help make transparent the kind of information that is held internally by wastewater companies, to better enable third party providers to consider how and where they can play a role.

We were preparing to mandate provision of this information through a licence condition. We will continue to work with the sector on whether price or cost data may also need to be provided in order to stimulate the development of this market.

We've also slimmed down on what needs to be published in terms of the information where there are successful bids. And this is a part of the market that Ofwat continues to monitor closely, effective in this control period and the next.

I'll now move on to water resources. For water resources, we estimate net benefits of our proposals of around 800 million pounds, with a cost-benefit ratio of around 25 to 1.

Our new framework centers on the development of two aspects of the water resource market; one for bids from third parties to appointees for supply or demand management and leakage services, and the other for third party resource providers to make bilateral contracts with retailers in the business market. This latter option will only apply in England and is related to the provisions in the 2014 Water Act.

We think both of these options are mutually reinforcing, the bilateral market will encourage incumbents to seriously explore third party offers through the bidding market, but unsuccessful bidders may turn to the bilateral market.

Again, we will provide basic information to enable this market to function more effectively, and we'll seek a licence change to support this, and to allow reasonable commercial and non-commercial use of this public data. This will enable easy access to data for supply-demand deficits and water resource costs in a consistent format.

The simple data requirements will place more weight on commercial negotiations to understand where a trade is viable, and to agree terms. To balance this, we will require each incumbent to publish clear policies and processes for assessing bids. We expect such a bid assessment framework will provide third parties with greater confidence that they will be assessed on an equal footing, as well as giving them a clear guide to the information that is required.

We will amend licences to set separate binding price controls for water resources. The price control will be a total revenue control, with an adjustment mechanism to take account of any bilateral market entry. Only revenue for post-2020 incremental water capacity will be exposed to utilisation risk from bilateral market entry. This is consistent with our focus on facilitating a market for new water resources. This means there will be no stranding risk for historic investments, even where bilateral market entry occurs. Hence again, we see no impact on the required return for existing assets. We expect the scale of bilateral market entry will be small relative to the requirement for new resources, and modest relative to the overall level of water resource capacity, and the pace of development to be gradual.

We are also considering whether there is a case for exposing some incremental water resource investments to market demand risk, in light of our broader approach of allocating risk to the party best able to manage it. We will look at such an approach on a case-by-case basis, and develop this further in our price review methodology.

Again, we have decided there's no need for an explicit RCV protection mechanism at PR19 for water resources. Based on the form of price control we've adopted, there is no additional risk to companies. But in addition, we propose that should a reallocation of the RCV between the water network plus price control and the water resources price control be required, we would be open to considering this as part of the PR24 review.

The realisation of benefits from markets is not the only reason for a separate price control; it will also enable better targeted regulatory incentives for water resources as part of the value chain and raise data quality.

In terms of the changes since December, we proposed in December that the RCV allocation between water resources and the water network plus control be undertaken on an unfocused basis. We're now adopting a different approach to how this will be done. A starting point here will be how companies currently allocate or recover their RCV-based regulatory profits within their wholesale price controls. So rather than relying solely on MEAV values, we'll ask companies to develop and justify an appropriate approach to the allocation for PR19, and we will review these in a proportionate and risk-based way.

We've also simplified the information platform for potential suppliers, and we're not proposing to set up a third party to run and manage this platform, rather to rely on the development of data aggregators within the market.

We also consider that issues such as resilience, drinking water quality and environmental impacts are best addressed by direct negotiation and regulatory approval rather than by provision of information to market platforms.

We expect the first version of the platforms should be available with the draft water resource management data, just in time to stimulate third party engagement at the point of public consultation on the water resources plans in early 2018.

Finally I'll touch on direct procurement for customers. As we set out in December, we are keen to see incumbents take responsibility for exploring all options for delivering significant new infrastructure, and to challenge themselves to deliver more effectively for customers by taking a longer term view.

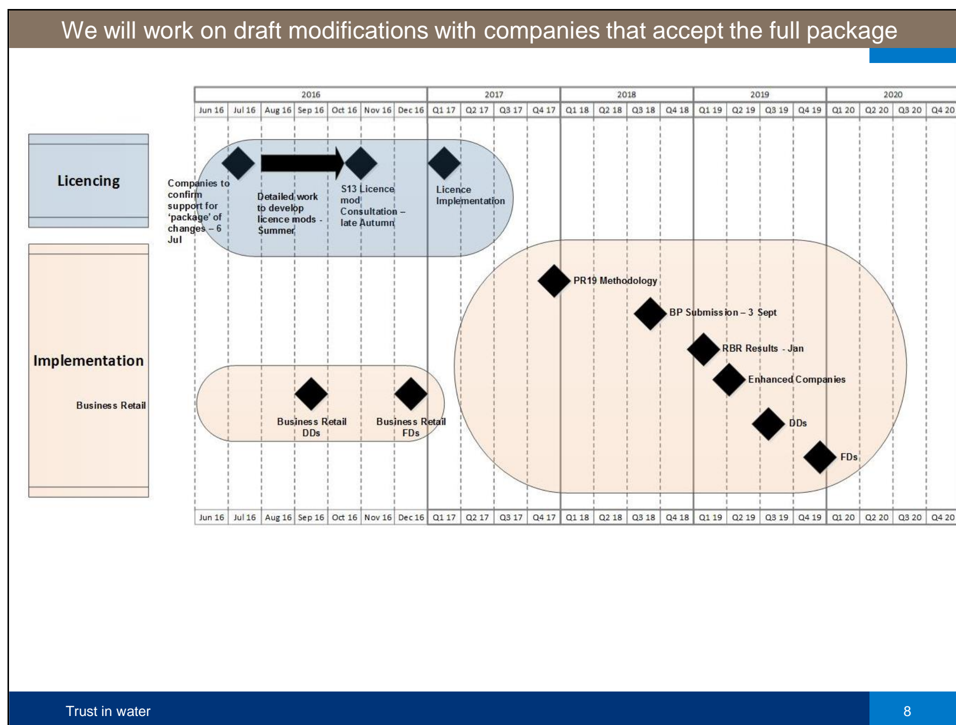
We consider that direct procurement for discrete large scale enhancement projects should provide incumbents with greater flexibility to select the best way to deliver value to customers. Again, the impact assessment for this policy suggests a net benefit of around 600 million pounds and a cost-benefit ratio of more than 10 to 1.

We will set guidelines for incumbents to encourage them to use direct procurement for suitable schemes with a whole-life totex value of more than 100 million pounds. This will be incentivised for the next price review by an integrated risk-based review of company business plans, and also failure to effectively adopt these options, or to analyse the requirement to do so could result in further work being required following business plan submission.

So those are the key changes I was planning to touch on. I will now hand back to Cathryn to explain what happens next, and then we'll have some time for questions.

Cathryn Ross: OK, thank you very much, David. Just in wrapping up, I want to be clear with everybody that we're now moving into a very different phase in our work. Having delivered the key aspects of the policy framework, we're really keen to build on this momentum, and move forward into implementation.

We will work on draft modifications with companies that accept the full package



And indeed we need to do this if we're to meet our commitments, publish our PR19 methodology statement for consultation in the middle of next year, which I'm sure everybody wants us to do. And in fact, just to be clear, business plans are due on the 3rd of September 2018, and that is a mere 575 working days away, and our PR19 methodology statement is due in around 400 working days. Around a month after our methodology statement, companies will be publishing their draft water resource management plans for public consultation, so we really do need to get on with this.

As I talk about our implementation plan, it's worth noting in terms of that plan that the only significant change we have made since December is that we've put back the

submission data for company business plans until, as I said, the 3rd of September 2018. And we did this in response to clear stakeholder support for better alignment of the water resource management planning process and the PR19 timetables

We're keen to work with companies who can quickly accept the full policy package

Licence modification	Broad acceptance of policy decisions in relation to:	Collaborative constructive discussion in relation to:
Introduce water resource/ bio-resource and water/ wastewater network plus price controls	The price control methodology will allocate: • water RCV between water resources and water network plus on an unfocused basis; and • wastewater RCV to wastewater network plus and sludge on a focused basis	• The extent of any specification in the licence of the form of the water resource and sludge control design • Regulatory remuneration of incremental water resource capacity from 1 April 2020 onwards: form of allocation of capacity utilisation risk between companies and consumers • Whether to include or exclude developer services from the network plus controls
Indexation of revenues by CPI/H instead of RPI	• The price control methodology will include transition of the RCV indexation to CPI/H • Some 50% of the RCV will be indexed to RPI as at 31 March 2020, the rest, including all new investment will be linked to CPI/H • The licence modification will allow Ofwat to confirm the final choice between CPI or CPIH in the methodology for PR19	• Implementing the commitment to NPV neutrality for the change to CPI/H indexation • Interpretation of principles to guide Ofwat's decision making on the approach beyond 2025
Water resource and Bioresources Information remedies	• Licence modification to ensure information is provided and shared in relation to water resources and sludge, detailed specification of data required would remain outside of the licence	• The specific information requirements and the process by which the information is shared/ published
Allow adjustments to revenue between price reviews	• The licence modification will allow revenue to be adjusted in period for ODI rewards and penalties	• The broad design of the licence modification • Supporting specific design and process policy issues

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So as we move on, the good news is that the constructive engagement that we had with everybody, and in particular with companies, has put us in a really good place. As I said earlier, as we move to this implementation phase, we still want to continue to work collaboratively.

We want companies to agree to the required licence changes as a package, and we've asked companies to make a clear statement of support for the policy package that we published today in July. Those that do, will be asked to join the development of the licence modifications.

A full set of draft modifications will be published by the 30th of September, with formal consultation for all companies, including those who weren't involved in their development, over October and November, and implementation during the first quarter of 2017. That means we can then publish our price review methodology consultation by July 2017.

Of course I'm conscious that there are still other aspects of the policy framework that we will need to move forward on, and the next big PR19 policy work that we're really

looking forward to investor input on is going to be our cost of debt consultation, and this is scheduled for this summer.

Just to whet your appetite, it will be a wide-ranging assessment of our traditional approach to setting the cost of debt, and topics for consideration are likely to include things like risk allocation, incentives, indexation, and pain-gain sharing.

So that concludes what we have to say. We are happy now to take any questions.

Questions

Operator: Certainly, thank you. Ladies and gentlemen, as a reminder, if you wish to ask a question, please press star and one on your telephone, and wait for your name to be announced. On the Web, you can do so on the Q&A box on the bottom left-hand corner of your screen. Thank you.

And you do have a few questions on the phone, the first one being from the line of Deepa from Bernstein Research. Please go ahead.

Deepa: Thank you. My question is that -- so I had two questions. One is that I noticed that in your document you say that you see benefits from early acceptance of the proposal for the licence modification. Could you just elaborate on that?

And secondly, I wasn't exactly clear about the guiding principles that you're talking about for RPI-CPI shift. I did read them several times. So could you just elaborate on exactly what you've committed to today in terms of the principles for the transition? Thank you.

Cathryn Ross: OK, so thanks for that question, and thank you for being first, well done. The first question that you asked was about the benefits that we see from companies' early acceptance of our policy package. This is quite important, and I'll pick up on that first, and then maybe hand over to David to talk a little bit about the principles on RPI-CPI transition.

So you're quite right, we have said that we would like to work closely with those companies who are quickly able to accept the policy package that we put out today.

The reason for this is that we fully accept that the development of licence modifications has some nuance to it and has some complexity to it. So we're very

keen to get company input so that we get licence modifications that are meaningful and practical and easy for people to use. So we're keen to work with companies to do that.

But going back to what I was saying earlier on about the need to keep the momentum going, and the need to move through to implementation, we do not want to reopen the debate that we think we've now drawn a line under today about the substance of those policy proposals, which is why we're keen to work with those companies who can accept the policy package to develop the licence modifications.

Now as I said in what I touched on earlier on, there will be a full formal consultation process for all the companies on the licence modifications that we develop, it's just that we envisage a prior process with a smaller group of companies who could actually help us to work those modifications up.

So I hope that's clear. David, I think the second question here was about the principles that we see governing future transition of RPI-CPI, and how those will work.

David Black: Yes, so we've set out these principles in the document today. So the purpose of the principles is to provide more clarity about how we will take the decisions beyond 2025 as a regulator in terms of the proportion of the RCV that will remain linked to RPI.

So it does set out the importance of things like the legitimacy to customers, the robustness of indices, providing the appropriate incentives in terms of raising debt, but it also does mention that we will take into account the extent to which there are embedded levels of RPI debt in the sector, and we'll also look at the impact on customer bills, and take account of developments in wider debt markets.

Cathryn Ross: OK, can we have the next question, please?

Operator: Certainly, thank you. Your next question comes from the line of Lakis from Agency Partners. Please go ahead.

Lakis: Good afternoon, Cathryn. Good afternoon, David. It's been a long day. Two questions for me as well. One is on the risk of RCV stranding. In sludge you've got an average revenue control, so there's volume risk.

In resources, you've got a total revenue control, but you say you're going to make adjustments for bilateral contracts, which presumably means that could also lead to a reduction, so there you also have volume risk.

So let's say you get to 2025, a big chunk of your allowed revenue in either case has gone away because of volume risk. Are you then going to take the RCV, let's say the depreciated RCV from 2020, and then go forward allocating revenues on that basis?

I can't see where the protection for the pre-2020 RCV comes in, unless you're making something explicit.

Cathryn Ross: Should we pick up that question first Lakis, and then return to your second?…

Lakis: And then I'll ask my second, yes.

Cathryn Ross: OK.

David Black: OK, so I think what you were saying in your question is that you understand that in terms of during PR19, there is no exposure to market risk in either price control.

So you're right, the sludge control is a volume-based control, volumes may go up or may go down, and that might affect the total revenue recovered by any company. We will obviously set those price controls on reasonable forecasts, which will allow the reasonable prospect of expected recovery in that business.

There is a question as to how we set sludge price controls beyond 2025. That's not something we have yet addressed. What we are signaling is that we are keen to look at alternatives to the approach that we will take in PR19, and so that would hopefully, in our view, take into account evidence about market-based prices. It might also be looking at opportunities to deregulate part of the market as well.

So if and when we take that decision in terms of how we regulate the approach to revenues in PR24, that will crystallise whether or not there's risk in that particular price control, and from that point it would be appropriate to consider how we would deliver on protection of the pre-2020 RCV, but would obviously be within that price control or it could be within the network plus price control.

Lakis: But you're not willing to commit at this stage whether or not you will give protection in 2025.

David Black: We are guaranteeing the pre-2020 RCV, and we will do so by the appropriate means that provides that protection.

Lakis: OK, so what you're saying is you're guaranteeing the pre-2020, or the 2020 RCV, but you're not giving the mechanism now, but you're committing to giving one in 2025. Is that what you're saying?

David Black: If we need to give one in 2025.

Lakis: If you need to give one, OK. And when you talk about the RCV, you mean the depreciated from 2020 going forward?

David Black: Yes, so the 2020 RCV will be running off, and there will be new investment being made during the period, which will create an amount of what could be called RCV, which would be …

Lakis: OK, and sorry just to keep on at this, but so really you haven't changed from your 2020 RCV protection commitment made in December 2015 proposals. You're just saying it will be protected, but we're not giving you a full mechanism now, but we'll look at it in 2025, and we commit to giving you a full mechanism then. OK, fair enough. Good to understand.

Cathryn Ross: Spot on. What about your second question?

Lakis: Second question was on direct procurement. Could you talk a little bit about the rationale why you went to 100 million totex, rather than 100 million capex? Because that would encapsulate quite a few more projects, and I was wondering what kind of projects you were thinking.

I mean obviously there will be capex with opex down the road, big totex, but you know, could it involve operating and maintenance? Just after a bit of color on your rationale behind that decision.

David Black: Perhaps I could have a go at that first, Cathryn. So in terms of the rationale for our threshold itself, we do see direct procurement being relevant for large discrete pieces of expenditures most likely infrastructure. And the reason for

that is that, as you probably well know, that for a small value project, it would not be worth the costs associated with writing the contracts, etcetera, around that. So there's a definite rationale to look at this for large items.

We have been very clear since PR14 that we look at the world on a totex basis, that trying to create an artificial distinction between capital and operating expenditure doesn't get the right outcomes, and so we think it is appropriate to do that for direct procurement for customers.

We don't have any particular projects in mind. We've talked about in our document the kind of projects that might reach the threshold in past price reviews, but it is still a relatively small number of projects. If there were a large number of projects that would presumably be a great outcome from a customer perspective.

Cathryn, do you want to…

Cathryn Ross: Oh, I think that's right. I mean it would be, I think, a retrograde step for us to distinguish in the direct procurement to customers threshold, a threshold that was based on capex, when as David says, we have moved to a totex way of viewing the world.

And I also think generally that one of the things that we've learned over time is that it's not helpful to have binary distinctions between things, because you tend then to get distortions in how people craft things, and where costs get allocated, and we just want to move away from that, so I think totex is absolutely the right way of expressing that threshold.

We have had a lot of discussions with people, quite interesting discussions, about the level of that threshold. I think one thing that's been very interesting for me in those discussions was I think there are different groups of people who would be interested in projects at different scales.

So there are some people who might be interested who come along and say well frankly, you know, anything less than, you know, 300 or 400 million wouldn't be interesting for us. There are other people who come along and said actually 300 or 400 million would be a bit too big for us, but actually something at 150 million might be of interest.

So we've taken soundings on that, and we think we've set the threshold at more or less the right level. You may have noticed in the document, we have moved away from any idea that there's going to be a hard and fast threshold with a requirement, so it is not the case that if you have a project of 101 million, you must use this, and if you have a project at 99 million, then that's fine.

We rather want to create a conversation and a scope for us to challenge companies as to whether taking the direct procurement route for projects of around this size and above is the right thing to do.

And I think that's clear if you get into the details of the document on that. OK, thank you Lakis. Can we have another question, please?

Operator: Thank you.

Your next question comes from the line of Dominic from Macquarie. Please go ahead.

Dominic: Yes, good afternoon. Sort of a probably one question rambling probably onto two or three. But the key sort of point here is that you mentioned a few times about innovation and the customer focus and the way of things changing.

The question I've got is basically do you think that an ODI and totex regime is actually likely now in PR19? Because there's going to be some innovation coming along that you're proposing that just doesn't sit comfortably in that -- in that camp, like demand side reduction, or sort of new whizzy ways of doing things.

And the second sort of question from that is do you think that you've put into place a blueprint that would allow for a corporate sort of break-up of the industry, in that maybe a status quo vertically integrated water company is now going to be untenable in light of potential household retail being broken away as well?

Cathryn Ross: OK, well why don't I take that up initially, and then I'll check in with David whether he has anything to add. OK, I think the innovation and customer focus point is an interesting one, and you're right to pick up on that.

We are very, very keen on both of those two points, the customer focus and the innovation, precisely because we think that this is where, if you like, the new frontiers in efficiency will come from, focusing scarce resources on stuff that matters most to

customers and society, and getting those dynamic efficiency benefits through innovation. So you're spot on in terms of picking up on those themes.

And I do think that the ODI and totex regime creates a framework that will enable those sorts of efficiencies, new and different ways of doing things to come forward. And in a sense, that's exactly the point. It's very hard to envisage, for example, you know, large-scale demand-side management having really been an option that companies would have been incentivised seriously to consider in, for example, the PR09 world, when we were distinguishing between opex and capex, and there were actually some significant incentives to take a more capex-driven approach.

So I think totex really does enable that more innovative approach there, and I think ODI's are quite flexible, and I think companies will continue to be able to propose bespoke ODIs at PR19, even though we are thinking about whether there should be a subset that are more standard and more comparable. So I do think it enables that to happen.

If you also think back on what David was saying about getting a market for water resources going, and the potential for people to bid in demand-side solutions into that market, then I think you could start to see a quite innovative dynamic there. So I think we have created a regime that will enable that to happen.

Your second point, Dominic, I think ever so slightly loaded perhaps, which I think means that I must say -- I said it before and I will say it again -- Ofwat does not envisage any sort of requirement to break up companies according to different stages of the value chain or indeed anything else. We are not in the business of dictating industry structures, or corporate structures, or anything like that.

What we are trying to do is inform, enable, and incentivise. So we're trying to create the information out there that will enable companies to understand the activities at different parts of the value chain, understand what risks they're managing at those different stages of value chain.

We're trying to enable them to make different choices about how they manage those risks, which may well include relying on third parties to do some of that management, and dealing with that through contracts. And then of course, and I remember saying this back in December, we will be looking at a significant efficiency challenge in PR19, and I think that will provide the incentive for companies to think very differently about how they do things, if they need to do that to become more efficient.

And of course in line with all of that, we are trying to enable company management and investors to take sensible decisions about how they structure themselves. We've said before, and I'll repeat it, but we are open to changes in corporate structure, we're open to transactions.

You will have seen, for example, with South West's acquisition of Bournemouth, that we did not oppose that. We did think there might be a small detriment for customers, but we didn't think that was a reason to oppose it.

And in fact if you think about the approach that we've outlined today in terms of the separation of price controls and the slightly more proportionate, targeted approach to the way we regulate, I think that also frees up scope, potentially, for greater consolidation, not necessarily of vertically integrated water companies at every stage in the value chain, but certainly at activities at certain stages in the value chain where perhaps there are scale and scope efficiencies to be had.

So certainly no forced break up, no forced corporate structure change from Ofwat, but information that is out there to enable company management and investors to make sensible choices about how companies are structured, and that enabling approach from Ofwat to facilitate that, coupled with some strong incentives to improve efficiency. So I hope that makes sense Dominic.

Dominic: Yes, thanks.

Cathryn Ross: Can we move to another question, please?

Operator: Certainly, thank you. Your next question comes from the line of Iain from Exane. Please go ahead.

Iain: Good afternoon, everybody. Can I just ask how you're going to calculate the long-term view of inflation for your CPI-based decomposition of the real cost of capital, if there aren't any CPI gilts in existence when you come to do PR19?

David Black: Yes, I'll have a go at that. So that is something we will look at obviously in more detail when we come to PR19. It is one of the points that Oxera made in their report that they felt that it was actually in fact easier to forecast CPI rather than RPI, because of the lower volatility associated with CPI and because we obviously have things like the Bank of England target rate. So there are a range of measures we use, so even when we were forecasting RPI in PR14, we did look at market

information but it certainly wasn't the only source of information we looked at, and for sure it we be a matter for discussion and debate, but there is quite a world of evidence out there on future forecasts of CPI and we'll be looking at how we take advantage of that.

Iain: Thank you.

David Black: And sorry, the one other point I would make, is that with RPI, there was issues with the formula and so it was progressively becoming de-coupled from CPI, and so that was one of the challenges of trying to take that into account in any one price control period. We won't face that issue with CPI.

Cathryn Ross: OK. Thank you, David. Do we have more questions on the line?

Operator: Yes indeed. And the next one comes from the line of Guy from Credit Suisse. Please go ahead.

Guy: Hi. Just a question from me on process. If I understand correctly, you're looking to consult on the licence modifications in October or November, but you're not deciding on the specific metric you're using for indexation, i.e. CPI or CPIH, until December of 2017, and then indexation of the pre-2020 RCV post-2025 until 2024.

So I'm just wondering how you're going to structure this, if you're effectively looking through these licence modifications to give Ofwat full flexibility on what they do in terms of indexation on that RCV post 2020.

And secondly, on that same point, you know, if a -- if a company rejects the licence modification proposal, am I correct that the process would be that it would be referred to the CMA, and the CMA would have to do some analysis on this, and you know, I'm sure they're very clear on what you've been doing but I'm wondering if you have any early views from them on their view of this, or whether they would, you know, say something along the lines of, you know, a transition from RPI to CPI, which is potentially fully offset by adjustments to the Pay-As-You-Go Ratio, and adds complexity to everything, doesn't necessarily, you know -- doesn't necessarily make economic sense.

Cathryn Ross: Sure. Can I -- can I just pick up on your last point first? You're right, so if companies don't accept the licence modification, then the process is an appeal to the CMA. As you would expect, the CMA is keeping its powder dry, that's what it

does, it's an appeal body, it doesn't opine on matters like this before it gets to them. Although we have been obviously keeping them fully informed, and they do know exactly why we're doing it, and you'll pick up from what I said before that we very strongly believe that we have a compelling public interest case here, which is the required test for that appeal.

You're also right that in terms of the licence modification substance, we will be looking for some flexibility there on CPI-CPIH, but David, do you want to pick that up?

David Black: Yes, so you're right that we will make the decision about CPI or CPIH in 2017, which will be in advance of the licence changes. We envisage the licence will provide the flexibility to choose between CPI and CPIH, with that decision being taken in the methodology statement.

So it's a relatively small amount of flexibility, it is an approach that we have discussed with stakeholders at a workshop we held back in March, and given the inherent uncertainty about where the government's going to get to on CPIH during the latter part of this year and early next year, this is obviously the prudent thing to do.

Guy: OK, thank you.

Cathryn Ross: Right, thank you. Do we have more questions on the line? I think we do.

Operator: Indeed. The next one comes from the line of Ashley from Societe Generale. Please go ahead.

Ashley: Yes, good afternoon. You've flagged the potential levers to -- in terms of mitigating the the tariff increase on the move from RPI to CPI, you know, in terms of Pay-As-You-Go and run-off rates.

At this stage, have you had any dialogue with the rating agencies with regard to whether, you know, sort of they will or won't be looking to make adjustments on changes to Pay-As-You-Go ratios?

David Black: So we've discussed the proposals with rating agencies at various points in time. It's obviously up to them to decide how they will take account of these

changes. In terms of the changes that we're talking about, they would be to push back cash slightly that would otherwise have come forward with the switch to the index. So if they look through that, which would be in fact favorable for companies' financeability assessments. Whether or not it would make economic sense we would leave everyone else to judge. But it is something that we're engaging with the rating agencies on, and obviously a matter for them to assess.

But just to be clear, what we're talking about here is a mechanism that would be pushing cash back, which in itself shouldn't lead to rating concerns that companies are somehow benefiting from the financeability from using these levers, which was an issue that was a concern for PR14.

Cathryn Ross: Thanks, David. I think we probably got time for a couple more questions, Operator, if we have a couple more.

Operator: Indeed. The next one is from the line of James from Deutsche Bank. Please go ahead.

James: Hi. Good afternoon. I just have a question on -- a follow-up question on direct procurement, and obviously you're saying you're encouraging companies to do that.

I'm just wondering if a company doesn't want to do that, and it looks like they've proposed an efficient level of totex for doing a scheme, what happens then? That's my question.

Cathryn Ross: OK, well I mean I think -- I think you're right, we are trying to encourage direct procurement rather than require it, and I think the acid test here is what's in the best interest of customers?

So if the company believes that it's delivering a particular solution that is the right solution, it's doing that at an efficient totex, and that it can demonstrate that it's thought about different ways of doing things, that it's tested the market, and it's got some evidence to support that, that could very well be just fine.

But it does give us a hook to have that conversation with companies, and hopefully will prompt companies to think slightly differently about how they assess various options in the context of their business planning. But David, is there anything to add?

David Black: No, it is exactly as you've said, that it's something that we want companies to look at, consider, and to seriously consider. It may be that self-providing is still the best option at the end of the day, but the onus would be on them to demonstrate that to us.

Cathryn Ross: OK, thank you, James. I think we've got one last question if we can, please.

Operator: No, no further question.

Cathryn Ross: OK. We've got no more time left I think on that. So I'm going to say thank you very much to everybody. Thank you obviously for listening to and engaging with this briefing.

I hope that's been helpful to you. I'm sure we'll talk with many of you in the coming weeks as you read through and have further questions and clarifications, and that's great, we'd really welcome that.

But I also just want to take the opportunity to thank many of you who've been part of the engagement process that has led up to this decision. I know David and I and Jamie and various other members of our team have had a lot of conversations with very many of you in recent months.

And I think you've been unfailingly constructive and patient and engaged with us, and I think it's really helped us to get to a better, more robust place, so thank you very much. I look forward to continued engagement with you in the future. Thank you very much.