December 2015

Trust in water

City briefing Water2020: Regulatory framework for wholesale markets and PR19

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Contents

Introductions and welcome
Jonson Cox, Chairman, Ofwat

Good morning, everybody and welcome on behalf of all of us at Ofwat to today's event. A welcome to those of you in the room, and a welcome to those of you who are watching the webcast.

Before I begin, housekeeping point, there are no planned fire alarms. If there is a fire alarm sounded, we will evacuate. The fire exits are to my right at the back of the room, your left at the back of the room and the two front entrances.

Let me just briefly outline the structure of today's session. We've published Water 2020: Regulatory framework for wholesale markets on PR19.

You will recall, I've been in the post for just over three years. When I took on the drawn-out consultations for PR14 and the flaws that were in those, I promised to the sector that for AMP6 we would consult early, by the end of the second year of the period, on our regulatory strategy and any associated licence changes.

Here we are, year one of the AMP putting out our principal consultation. It builds on what we did in PR14. It's a firm proposal on which we're consulting. We have spent a lot of time as a board and as an executive team in getting this to be a balanced proposal. It's one that will keep the sector moving forward in the interests of customers and society. We expect companies to look at it as a package, not just to decry the points that maybe aren't quite so welcome, and to bank those which go with the grain.

We also expect companies to look at it through the lens of their customers and society as a whole, as well as in terms of investor returns. In just a moment, I shall hand over to Cathryn, who will set out the challenges that we face - and we believe the sector faces - in a little bit more detail. David Black, our Senior Director of Economics will take us through the fine detail of the consultation. That is, what we're doing to build on the approach that we adopted for PR14, what we're trying to achieve with our proposals, and how we've designed it.

Now when we settled the Section 13 difficulties last time around, we agreed a licence condition with companies about constructive engagement on future regulatory challenges. I'm very pleased to say that Ofwat has engaged extensively with the sector on the topics which we will cover today. After David, we'll hear from Peter Simpson, Chief Executive of Anglian Water who will speak about the breadth of engagement there has been this time around.

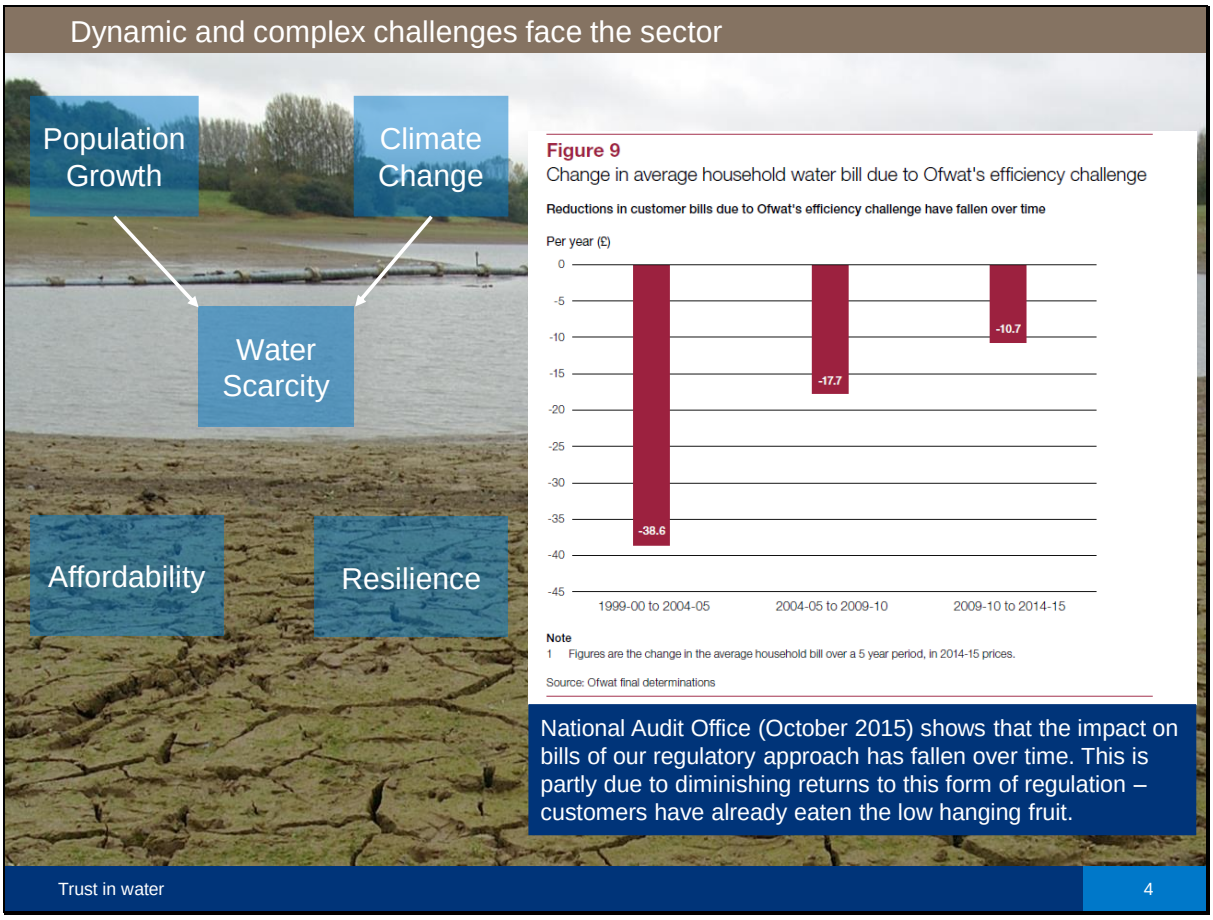
You'll hear about the marketplace for ideas hosted by the industry, which has happened in order to instigate debate. You'll hear about over twenty papers and proposals posted on that forum. After Peter's session, we'll open the floor to questions for me, for Cathryn, for David and we'll be joined by Keith Mason, who is of course well-known to most of you. We expect this to take between forty-five and fifty minutes overall, plus the time for questions. We'll make sure there is good time for questions. Without further delay from me, over to Cathryn.

From strategy to reality
Cathryn Ross, Chief Executive, Ofwat

Thank you very much, Jonson.

As Jonson said and you probably know, we've today published an important suite of documents from our Water 2020 programme, setting out how we see the regulatory regime evolving for our price review in 2019. We are of course working on some other things as well, in line with our strategy and our regulatory model. We're thinking about resilience in the light of our new statutory duty, developing our regulatory reporting, market intelligence and assurance framework, assuring that we have an efficient and effective casework function, and working towards the opening of the non-household retail market in April 2017. As you know, we are now also looking at the costs and benefits of household competition, as the UK government asked us to do in its competition plan a couple of weeks ago.

Dynamic and complex challenges face the sector



We're going to focus today on our proposals in relation to Water 2020 and in particular, in the run-up to PR19. David's going to take you through the substance of the “what” in a second, but I want to spend a few minutes before we get to this explaining the “why”. I want to set out for you why we think there is, if not a burning platform, then a very compelling case for change. Evolutionary change, but change nevertheless.

I want to start by acknowledging what's been achieved. The sector was privatised more than 25 years ago, with the aim of bringing private capital and the expertise and discipline of the private sector into an industry that had suffered from chronic underinvestment. The sector and its investors have delivered considerable success against that objective. We've seen more than £125 billion of privately financed investment, which has delivered big improvements in service to customers, who are now 5 times less likely to suffer from unplanned supply interruptions, 8 times less likely to have their homes flooded by sewage, and 100 times less likely to suffer from low water pressure.

We've seen big improvements in the environment as well, so that we now have more than 200 Blue Flag beaches and salmon in the Thames and in the Mersey. All this is being delivered alongside big improvements in efficiency, which means that bills are a third lower than they would otherwise have been. We're not in a bad place. Let's also acknowledge the fact that there's already been significant change in the sector and in our regulation of it. You saw some significant changes in PR14. The move to outcomes, driven by customer engagement, more flexibility for companies in how they deliver through totex, and a better balance of risk and reward that more closely aligns the interest of capital and company management with those of customers for example, through the introduction of ODIs and our move to an upper quartile benchmark on efficiency. You also saw a more proportionate and targeted approach to regulation through our risk-based review and all of this with more transparency than ever before.

I want to be fair and say that the sector really embraced those changes. Companies have already stepped up to owning the relationship with their customers and doing more than ever before to put them at the heart of their plans. They've created performance commitments, got their heads around ODIs, taken advantage of totex and the levers available to them on financeability, all of which made PR14 a success: a 5% real terms reduction in bills, more than 500 tailored performance commitments across the industry, driven by more than 250,000 direct conversations with customers and £44 billion of totex investment. A final determination, which by all accounts was seen as challenging but fair.

So why is Ofwat making more changes? Why can’t we all just rerun PR14 in 2019, especially now we all know what we're doing? Well, I don't think that's an option, and I want to be clear about why.

Like it or not, this sector is not a sector in steady state. This is a sector that is facing some critical, and I would say, existential challenges. First, it faces serious challenges in respect to the very essence of what the sector does; the reliable supply of wholesome drinking water, the taking away of wastewater, its treatment and safe return to the environment.

These challenges come in part from population growth. Our population is projected to rise to 73.3 million by 2037, and that's an increase of around 13%. The bulk of those additional people will be in the south and east of England, where we already have less water per head of population than in Morocco. These people will generate sewage that will need to be taken away and treated, and the development needed to house them and provide places for them to work and play will create surface water runoff. All of that's before you think about the impact of climate change, which will

bring more frequent and more severe weather events. Less water when and where we need it and more water when and where we don't.

If you think that the sector will just be able to spend its way out of that challenge with customers' money, then it's time to think again. Because the second challenge facing the sector is one of affordability. It might be tempting to think about this as yesterday's problem, but I don't think so. Yes, the economy is picking up and yes, incomes are rising after years of decline. But interest rates are likely to rise too over the next few years, and housing costs are closely correlated with interest rates. The only way in which affordability will be less of an issue in PR19 is if growth in wages outstrips the rise in housing costs, and I wouldn't bet on that.

What this means is that the defining challenge of PR19 is one of delivering more for less. Okay, so you say we know how to do that, we did that back in PR14, 5% real terms reduction in bills, £3 billion of savings back to customers over the period. True, but the vast majority of that bill reduction was delivered through a reduction in the cost of capital by around 140 basis points compared to PR09. Now, with the cost of debt actually being lower now than it was in our final determination, and 75% of debt being embedded, I wouldn't be surprised if the cost of capital in PR19 is lower than it was for PR14. But 140 basis points lower? I don't think so, which means that the challenge of achieving more for less is going to have to be met the hard way. By making better use of all the resources that companies have available to them. By innovating, by finding new and better ways of doing things.

The good news is that what we did at PR14 will really help. The focus on outcomes, the flexibility from totex, and the incentives that come from ODIs mean that some companies will establish a new frontier on efficiency, both in terms of outcome delivery and costs. In fact, you could hear that from the interim results presentations from the listed companies a couple of weeks ago. There are companies that are putting the work in now to deliver out-performance.

Although it has to be said that this frontier shift on the part of some companies, together with the work that we're doing to look at the wider use of comparators, and to shift to a more forward looking efficiency benchmark or one closer to the frontier, will mean that those at the back of the pack will have a harder time. But what we did at PR14 is simply not enough. Diminishing marginal returns to the old regulatory model set in a while ago. The NAO pointed this out in their recent report. The value of our efficiency challenge on the average bill, back in PR99, was £39. At PR14, it was £11. So where does that take us?

Progressive developments in regulation

Let me give the headlines and David will say more in a minute. First, I want to be clear that this is about the progressive development of our regulatory framework. It's not about wholesale change. By setting the sector up to succeed in the face of these challenges now, we buy ourselves the ability to take an evolutionary approach. We'll apply many of the same principles in PR19 as we did in PR14. The features of outcomes, driven by customer engagement, totex, that better balance of risk and reward, and our risk-based review enabling that proportionate and targeted approach to interventions, and greater transparency; that all stays.

Price controls in the wholesale part of the value chain stay RCV-based and stay five years in duration. But we do see change in four areas. First, water resources, where we want to enable and incentivise companies to choose the most efficient new water resources. We envisage a binding separate price control for water resources with an unfocused allocation of RCV. We do not envisage stranding of existing water resource assets and we'll protect the RCV as it exists at the end of March 2020.

Second, sludge treatment, transportation and disposal. Markets are already emerging here and technology is moving on fast. Regulation needs to catch up. We see scope for third parties, including other water companies, to do what the incumbent companies do now, but in a more efficient, value creative way. So again, we envisage a separate binding price control here. But with the RCV allocated here on a focused basis, reflecting modern equivalent asset values. Again, we do not envisage stranding existing assets and we'll protect RCV as it exists at the end of March 2020.

Third, direct procurement for customers. This involves the use of markets and market testing in relation to enhancement schemes, delivering the sort of benefits we've seen through the Thames Tideway model. In doing so, we recognise the uniqueness of some aspects of that model, such as the government's support package. But we do see great potential here to deliver benefits for customers.

Fourth, indexation, both of prices and of regulatory returns. The RPI is a discredited index and it's not going to be updated. There is a compelling case based on the need to maintain legitimacy to move to indexation of prices and regulatory returns on the basis of CPI. Customers increasingly look to CPI and not RPI, so it makes sense for the indexation of prices to reflect this and indexing regulatory returns to CPI, not RPI, from the customer perspective, should help to reduce bill volatility and perhaps better reflect changes in industry costs.

Now, I know this move is not one you want to see. But I want to assure you, we really have thought through the impact of this on the sector's ability to access capital markets. I do not see a detriment here to the investability of the sector. In saying this, I note that not all industry debt now is linked to RPI, and I also note that there's evidence, and I'm thinking here of the sterling CPI linked bonds that were issued this year, that suggest a pent-up demand for a CPI hedge. But I do recognise this is a significant change, and there is some existing industry RPI-linked debt. So, we envisage a transition mechanism here, so that a proportion of existing RCV will continue to be linked to RPI while the rest moves to CPI. We also expect to make this move in a way that is revenue neutral and neutral on an NPV basis; a transition for both customers and companies.

I have to tell you, I think the measures we are proposing are very reasonable and balanced. I can also tell you that in coming to that proposal, we did consider tougher options here, but we think this strikes a reasonable balance.

So those are the headlines. It's a balanced package overall. Some things remain the same; some things, we're moving on. Not for the good of our health or the sheer hell of it, but because we need to if this sector is to continue to deliver for customers and

society in the face of what I genuinely think are the most complex and dynamic challenges its faced since privatisation; because that continued delivery is critical for the sector's legitimacy, for the continuation of what you might call its social licence to operate; and ultimately for its investability.

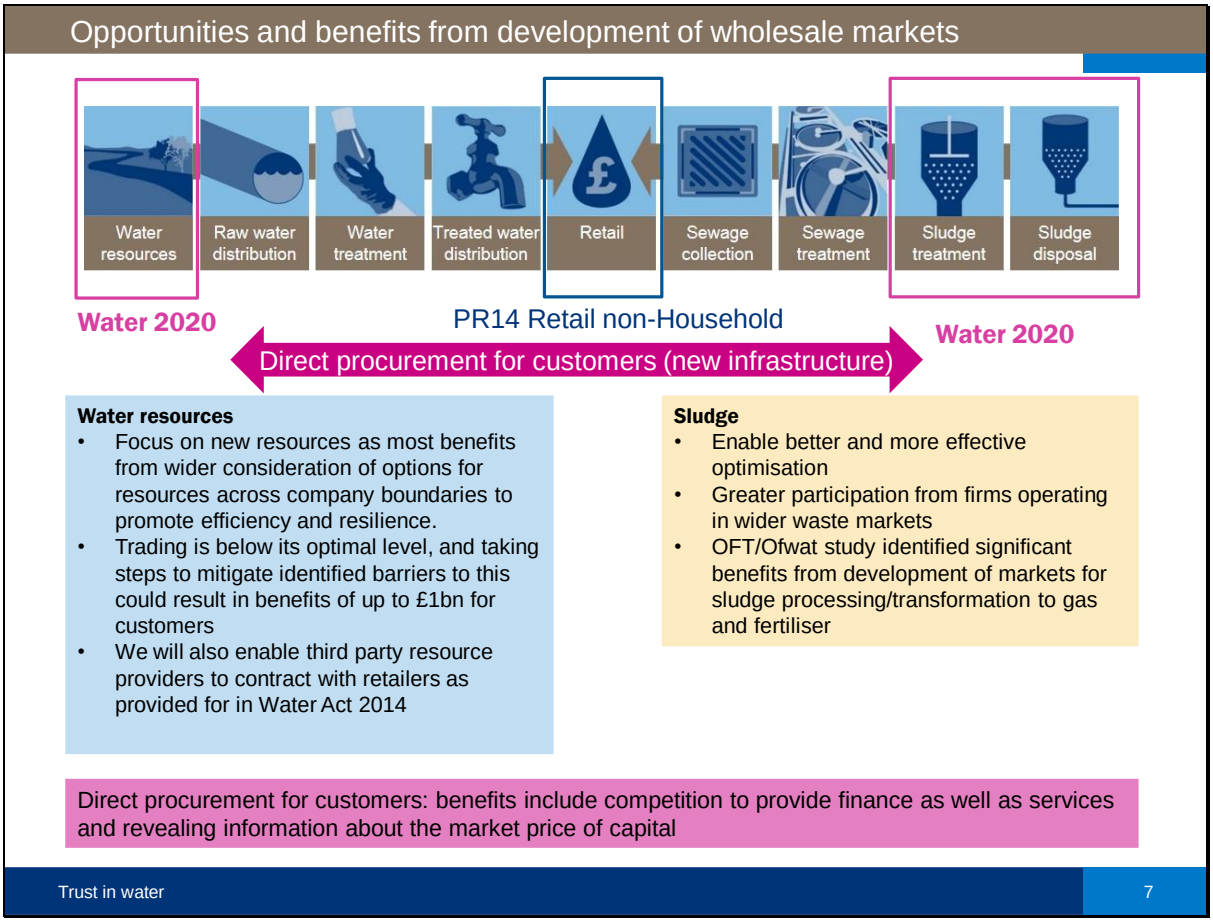
Going back to what I said at the start, the message that I take away from the track record of this sector, from what has been delivered since privatisation, from what was delivered at PR14, is that working together, companies, the regulator, investors, government, and others, we can do this. We can make the changes that are needed to meet those challenges. If you look at how far we've come over the last 25 years, and if you look at the kind of constructive engagement we've seen through PR14, and the level of participation and the quality of thinking that people have contributed to our marketplace for ideas over the last 12 months, I've absolutely no doubt we can get there.

I just want to take this opportunity to thank those of you in the room now ... who've contributed to this thinking ... and to thank you in anticipation of your continued engagement. Now, I want to hand over to David who's going to take you further into the main points from our proposals.

Our December Water2020 proposals
David Black, Acting Senior Director, Water 2020

Thank you Cathryn. I'm going to highlight the key points of our proposals and what they mean for customers and companies. I will cover the opportunities for markets in the wholesale value chain, how we will enable these markets, what this means for the way we regulate, including our approach to indexation of price controls from PR19. Firstly though I would like to mention the process of working with stakeholders that has contributed to the development of our thinking. Early this year we opened the marketplace for ideas, providing an opportunity for all stakeholders in the sector to contribute their own views on how regulation should evolve. Now co-hosted on Water UK's website, we have over 25 papers on a broad range of issues.

Opportunities and benefits from development of wholesale markets



In summary, our proposals will deliver substantial benefits to customers as we encourage companies to make better and more efficient use of their assets and resources and also enable better environmental outcomes from reflecting the value of water and removing barriers to reuse of waste. Our approach will enable and inform companies to take full advantage of the opportunities to innovate and better use the full range of options for delivering service to their customers. It will also create new opportunities for investors to participate in markets, alongside the opportunity to continue to invest in regulated businesses.

Our proposals will also enable the development of a resilient sector over the longer term by encouraging better informed decisions and considerations of a full range of options to meet the needs of customers now and in the future. The issue of how we embed resilience within our strategy is addressed in a separate paper we have released today; Towards Resilience. Cathryn has set out the challenges facing the sector and how we have to learn to do more with less. We see markets as a key

enabler of the opportunities to do this. Markets reveal information about costs and value that will enable better choices over time. They are also vital for companies to be able to demonstrate to Ofwat, in future price controls, how they've developed their business plans based on the most efficient and resilient options. Better information from alternatives from well-functioning markets should support this.

We consider that the promotion of markets can deliver better outcomes for both water resources and sludge. However, the role that markets can play differs between these areas and therefore our approach will be different in each market. The sector faces real challenges in making better use of water resources. Trading between companies could help develop the lowest cost and most resilient solutions by optimising across company boundaries. Today 94% of water trading arrangements that exist were put in place prior to privatisation and water trading is well below its efficient level; taking steps to encourage this could result in benefits of up to £1 billion.

Moving onto sludge, as Cathryn noted this business sits in a broader context of a wider organic waste market. It's an activity experiencing rapid technological developments and where the task has changed from just minimising the cost of disposing a waste product in a safe manner, to an activity with growing opportunities to transform into energy and to fertiliser. It is not an activity where the standard regulatory toolkit of incentivising cost minimisation would deliver the best results.

Finally, moving onto direct procurement for customers. This is about using a competitive procurement process to unlock benefits both in terms of financing as well as in design, build and operation of these assets. The experience with the procurement of the Thames Tideway Tunnel illustrates the potential benefits of market determined financing costs. While there were a number of one-off features associated with the Thames Tideway due to its scale and unique risk profile and an associated government support package that won't be repeated, the model of the appointee acting to procure on behalf of their customers can be applied elsewhere. This is similar to a model that Ofgem have used for electricity transmission, by companies proposing new investments of greater than £100 million in discreet projects should procure this from independent third parties. This enables customers to benefit from market determined financing arrangements, as well as the normal procurement benefits of construction and operation. I note there are six projects proposed in PR14 business plans of this scale, which indicates that there's real potential in this area.

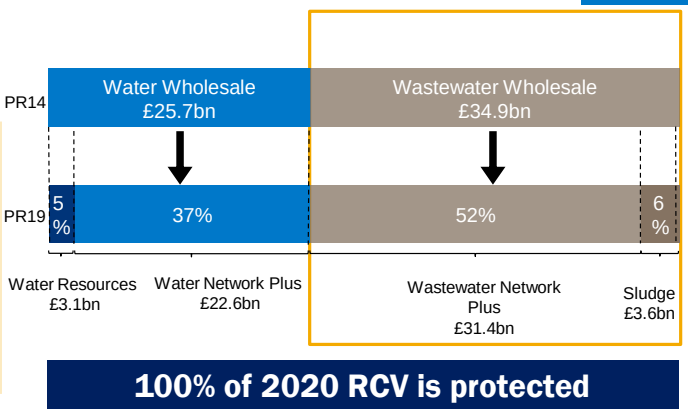
Enabling markets for sludge

Enabling markets for sludge

Remove regulatory barriers to third party providers and enable wider optimisation

Main enablers:

- Separate binding price control for sludge to reveal information and ensure level playing field with third party providers
- Mandatory information platform to enable consideration of using a neighbouring plant



Regulatory predictability – extension of RCV protection from 2015 to 2020. Investment to 2020 in sludge protected. New investment from 2020 will be at risk.

"Focused" RCV allocation – reflecting modern equivalent asset value in sludge

Price control rather revenue control so benefits to appointees from volume outperformance from 2020

Potential scope for move toward deregulation from 2025

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Moving on to talk in a little more detail about how we will enable the development of sludge markets. We see there are opportunities here for companies to better optimise the cost of processing by considering the use of adjacent facilities owned by other companies, as well as the opportunity to enter the wider organic waste market or for waste processors to enter the sludge processing market. In order to enable and incentivise companies to trade with each other and consider the wider scope, we consider the following measures are required. Firstly, separate binding price controls for sludge in order to better reveal information on costs, including capital costs and to mitigate any potential cross-subsidy concerns between the sewage network and also support company decision making and focus.

Secondly, we're proposing to make data available on a centralised information platform, which will provide data on transport and processing costs, capacity and sludge quality at an individual site level. This will enable companies to consider whether it's best to process sludge on their own sites or to use a neighbouring plant. We will also provide guidance on the basis which incumbent operators should

consider and evaluate potential opportunities to have the sludge processed. We think this package of measures will enable waste water companies to better assess the potential for use of third party providers and for third party providers to identify opportunities. Crucially it will also reveal to Ofwat better information about the costs of sludge processing.

A separate price control raises questions about how to allocate the RCV between what would be the network plus control and the new sludge control. As Cathryn has noted we're proposing that this is done on what's called a focused basis. This means that the value allocated to the sludge RCV is equal to the replacement value of the assets needed to provide sludge services. This amounts to around 6% of the total RCV. This means that the prices charged by companies will reflect the full cost of the activities and enable third party provision for both existing and new service.

Finally, we've proposed to extend the period of RCV protection from 2015 to 2020 which means that all the value transferred into the new sludge price control remains protected. From 2020 new investment in sludge will be subject to commercial risk and the sludge price control will be set on a volume basis with companies benefiting from the upside of growing their business but also being exposed to downside risk. Beyond PR19 we will be looking for opportunities to take advantage of markets to reveal the net costs of processing sludge and including the scope for deregulation or using market driven gate prices to set price limits where markets are not fully effective.

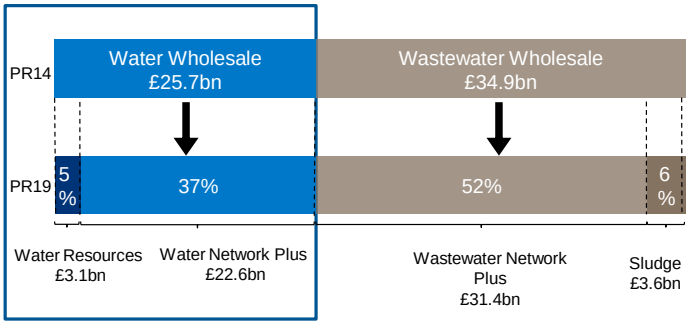
Dealing with scarcity – making better use of water resources

Dealing with scarcity – making better use of water resources

Making better use of water using markets to reveal value and best option to deliver for customers

Main enablers:

- Separate binding price control for water resources to reveal information and ensure level playing field with third party providers
- Mandatory information platform to enable better consideration of options with regular updates
- Access pricing to enable level playing field with incumbent source



100% of 2020 RCV is protected

Regulatory predictability – extension of RCV protection from 2015 to 2020. Investment to 2020 in water resources is protected

New investment subject to competition at point of procurement

"Unfocused" RCV allocation – reflecting value as proportion of wholesale water RCV

Revenue control – no volume risk post 2020

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Moving on to water resources. We can help play a role in the sector to better discover and understand the value of water and markets are a means of helping reveal this value. We consider the scope for markets in water resources is best focused on new resource and not on the provision of water resources to displace existing water provided by companies. This is because the cost of developing new resources is usually much higher and indeed much, much higher than existing resources. We propose to enable water trading by creating a market database with information on companies' potential demand supply imbalances and requirements for additional water and also the costs and quality of potential sources. This will help provide a level playing field for other providers to assess the opportunities to enter the market and for companies to demonstrate in their business plans that they have developed the best option.

We will also set binding price controls for water resources to ensure costs are clearly allocated to water resources in other parts of the wholesale value chain to promote a focused approach to management of these resources and to provide third party

providers with greater certainty about their costs and recovery over time. The establishment of separate price controls again raises a question about the allocation of the existing RCV. For water resources we will allocate on an unfocused basis, so that the proportion of the RCV allocated to water resources is set by the level of water resource assets as proportion of total wholesale water assets. This amounts to about 5% of the total RCV. The remaining part of the wholesale water RCV will be allocated to the water network plus control covering more water transport, water distribution and treatment.

In addition to promoting water trading between appointees and from third parties, we'll also take steps to enable the Water Act provision for upstream markets in England. This will allow a non-household retailer to contract directly with a third party water resource provider and use the incumbent’s network to transport water to their customers. In order to enable this to happen we need to set access prices to the incumbent’s network and we'll be setting access prices on a basis which takes account of the incumbent’s costs of acquiring its own resources. This means that in areas where resource costs are high their access prices will be low and conversely in areas of abundant resources access prices will be higher, just reflecting the costs of providing the service.

This proposal builds on an approach to pricing developed by United Utilities as part of the marketplace for ideas. We will also extend the protection of historical RCV until March 2020. This means that the investment that takes place under the existing regime is protected from any risk of stranding arising from market opening. We believe this provides a balanced solution and an opportunity for markets to emerge without the detriment to the cost of capital under the existing regime.

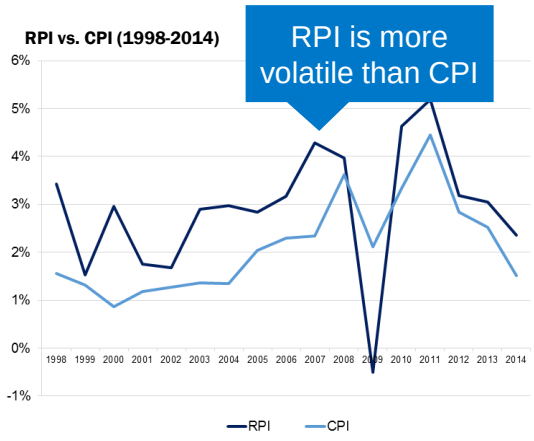
Securing a sustainable and credible approach to indexation of price controls

Securing a sustainable and credible approach to indexation of price controls

Inflation is an important component of the regulatory framework – general inflation risk borne by customers since privatisation by indexation to RPI

Since March 2013 the ONS has no longer classified RPI as an official National Statistic, as it "failed to meet international standards"

In January 2015 the UK Statistics Authority published the findings of an independent review, led by Paul Johnson (Director of the Institute of Fiscal Studies) into UK price indices. The Johnson report found serious issues with RPI, describing it as "statistically flawed". He further recommended that "Government and **regulators** should **work towards ending the use of the RPI as soon as practicable.... no taxes, benefits or regulated prices should be linked to the RPI."**



Propose transition from RPI to CPI from PR19

- Commitment to no impact on real returns
- Provide scope for cashflow reprofiling to allow companies to maintain neutral cashflows over time
- Acknowledge importance of transition for existing RCV by allowing for 50% of RCV at 2020 to remain linked to RPI.

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Moving on to the issue of indexation. Since privatisation we have allocated risks around general price inflation to customers and so have indexed prices to inflation. The measure of inflation adopted at privatisation was RPI. In January 2015, Paul Johnson of the Institute of Fiscal Studies reported to the UK Statistics Authority on measures of inflation. He found that RPI was an upwardly biased measure of inflation that is not calculated according to international standards and that national statistical institutes around the world reject the approach used in the calculation of RPI to estimate price changes and that the calculation methodology has basic statistical flaws. Further there were issues with the use of RPI as a suitable measure of overall inflation due to issues with the weights of data sources, population coverage and treatment of some goods.

The RPI methodology will not be updated like CPI to reflect changes in how price information is collected and compared. Therefore there's scope for sudden changes in the difference or the wedge between RPI and CPI. Johnson recommended that

the regulators should end the use of RPI as soon as practical. RPI lost its national statistic status in March 2013 and other regulators such as Ofcom, the CAA and WICS have all begun to move from RPI to CPI while Ofgem has recently launched a consultation on the same issue. As indicated on the slide, CPI is not subject to the same volatility as RPI and moving to CPI would reduce risk to companies from large swings in RPI. Similarly customers would be less exposed to sudden bill increases due to rising RPI. There are profound questions of customer legitimacy at stake here. Customers receive bills in nominal terms and they're likely to derive little comfort from assurances that they're protected if they face large bill increases from an index which is little used in the wider economy and one which is no longer officially recognised as a reliable measure for inflation.

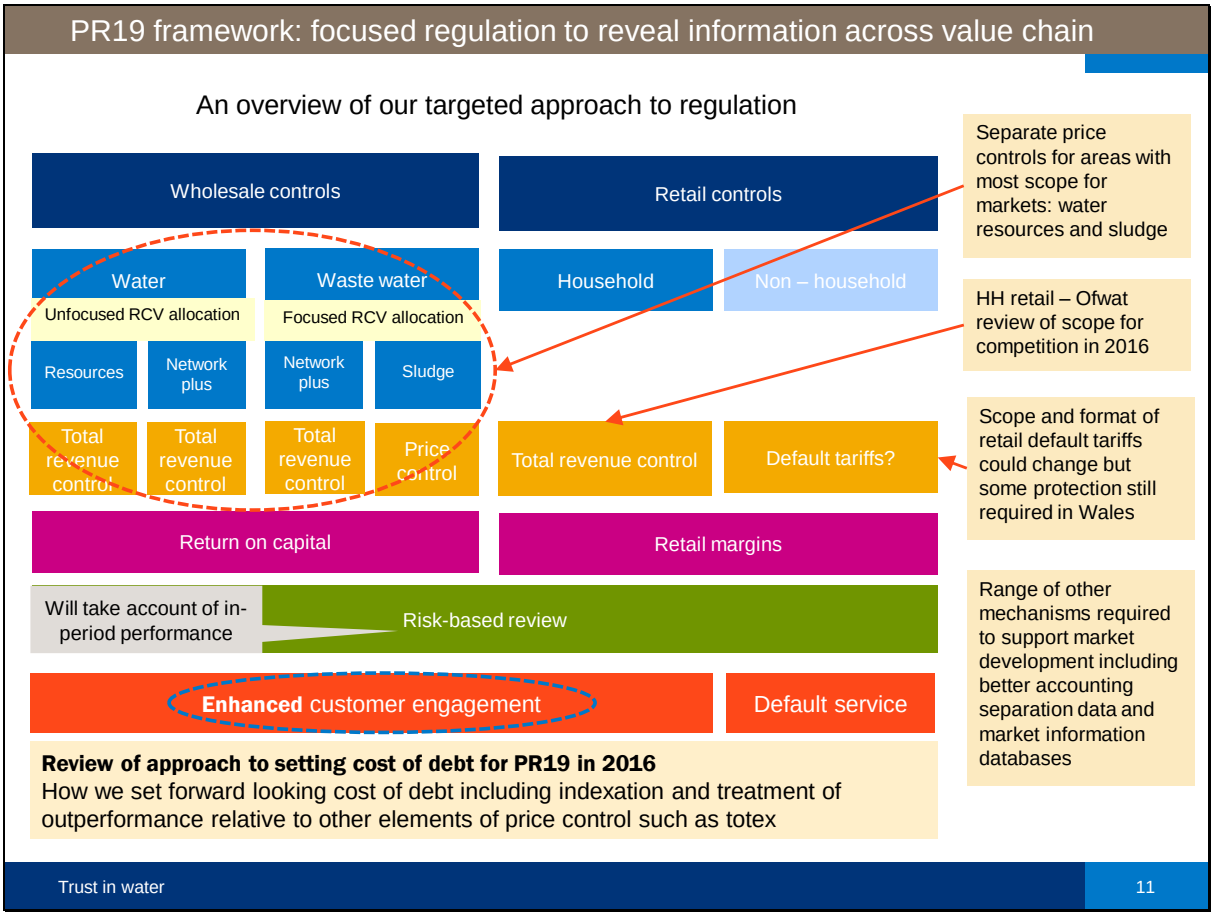
We believe that continued dependency on RPI in setting price controls would be sleepwalking into dangerous territory, something which we're not prepared to do given our statutory duties. We, of course, appreciate there are issues about how to transition from 25 years of RPI to a new form of indexation. There are three issues which I would like to touch on. First the transition from RPI to CPI will be neutral in financial terms, i.e., the net present value of cash flows in either form of indexation will be the same. All other things being equal, using a measure of inflation with a lower value will mean a higher real WACC. I would stress that the change in indexation is not a backdoor way to lower the WACC. If we think the WACC needs to be lower we will reduce it, but we will be transparent about how we do this. I hope the experience with PR14 demonstrates our willingness to lower the WACC when there's market evidence that this is the right thing to do.

Secondly, companies will have tools to manage the impact of changing on the timing of cash flows. Again, all other things being equal, a switch to CPI is cash positive, i.e., it brings cash forward from later periods into the current period. We do not consider that switching indexation approaches should imply a change in customer preference about bill profiles over time. We therefore propose that companies should engage with customers around offsetting these cash flow impacts.

Thirdly, companies have an existing stock of RPI linked debt. About 35% of the RCV is financed from indexed linked debt. It will be possible for companies to hedge this risk and we would expect a market to develop to support this. However, we recognise that doing so would have a cost. In setting price controls we note that we base our view of allowed returns on a notional level of gearing and a level of embedded debt. In our most recent review our notional gearing was set at 62.5% with an assumption that 75% of debt was embedded, i.e. it existed from previous periods. This amounts to just under 50% of the RCV. Our proposed approach is therefore to allow for 50% of the RCV to remain linked to RPI for PR19, which in effect allows for all embedded debt to be linked to RPI.

We note that most companies are well within this allowance, although there are a few that remain above this level. This reflects a much higher level of gearing than our notional assumption, something which we have always been clear about is at equity holders' risk.

PR19 framework: focused regulation to reveal information across value chain



The next slide shows the PR19 framework on a page. I won't go through this in huge detail. As Cathryn has noted we're building on the framework for PR14 with an outcomes and a totex approach and there will now be four wholesale price controls rather than two. Our risk based review will take account of company performance during the current period, as well as the quality of their business plans and how they take account of the longer term. We want to build on the approach to customer engagement to PR14, where we saw a huge increase in the level of customer engagement. However, we're keen to emphasise that customer engagement should not just happen around price controls.

In the 2015 Institute of Customer Service satisfaction index we note that not one water company made it into the top 50 companies in the UK. We think the sector can do better and we're looking for the sector to step up in the period to 2020.

Finally, I would note our proposed review of the approach to setting the cost of debt. This will address the issue of indexation of debt, but as part of a wider review about how we set the forward looking cost of debt and how our approach to sharing financial out-performance and risks, compared with our approach to other elements of the price control such as totex.

Implementing policy through licence changes

Implementing policy through licence changes

Identify policy approach, setting out aims and benefits of changes and identify implications for licences

Our proposed approach in our consultation document **will require licence changes to enable**:

- Setting of new wholesale price controls,
- Indexation to CPI; and
- In-period adjustments

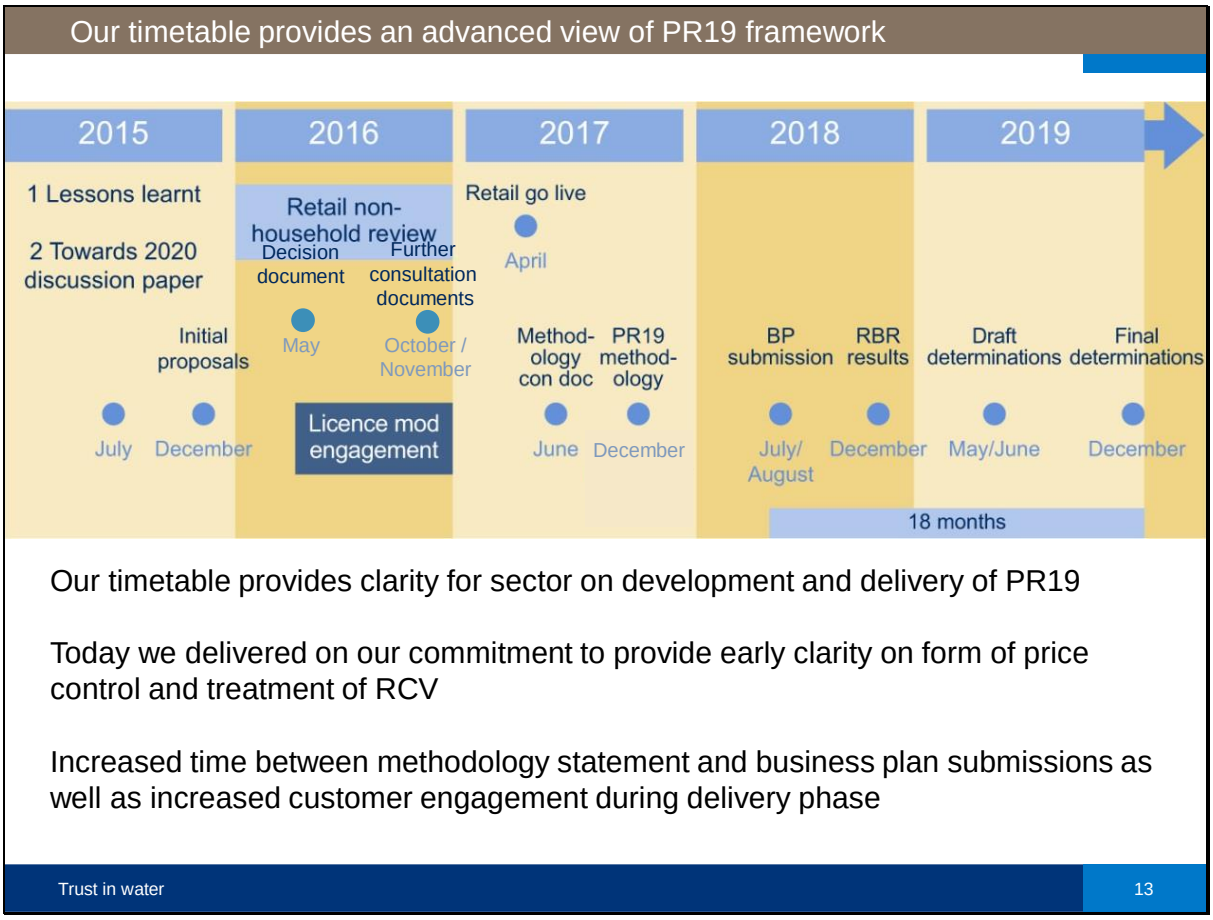
Following our Decision paper in May, we **will consult with sector on a package of changes required to implement policy in second half of 2016**, seeking agreement to licence changes

Trust in water 12

As has been mentioned, some of our proposals today will require licence changes. We're setting out the proposed framework and our aims and the benefits of these changes and identifying the implications for company licences. Our proposed approach in the consultation document would require licence changes to enable the setting of new wholesale price controls, CPI indexation and in-period adjustments.

We will engage with the sector about the implications for licences arising from the consultation proposals early in the new year. Following our decision paper in May, we will consult with the sector on the package of changes required to implement policy in the second half of 2016.

Our timetable provides an advanced view of PR19 framework

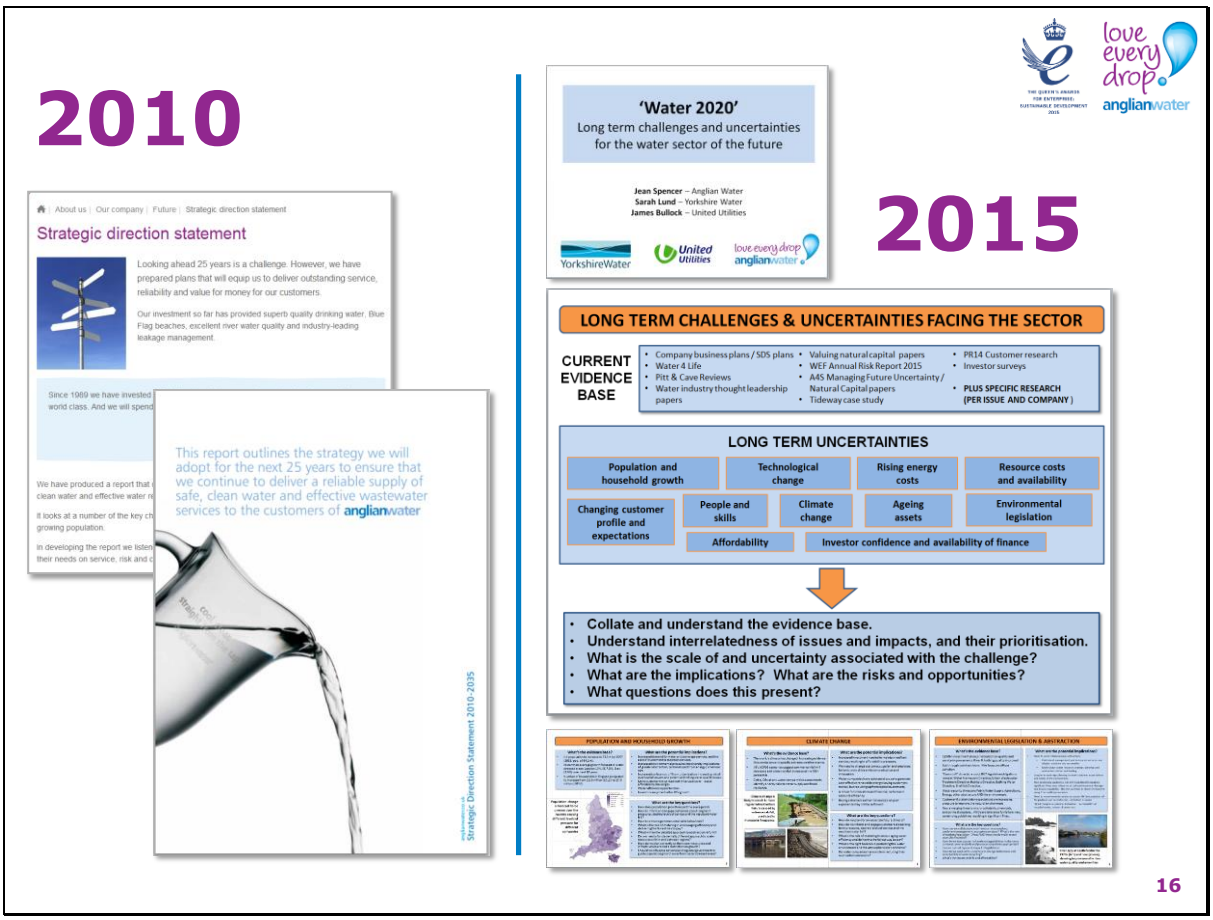


Finally a note on our timeline to the delivery of final determinations in 2019. Today we have delivered on our commitment to provide early clarity on the form of price control and treatment of RCV. Our timeline includes bringing forward our methodology statement to December 2017 to allow more time for companies to prepare plans while also enabling business plan submission dates to be brought forward. The next step in this process from our proposals released today will be consultation and then publication of a decision document in May 2016. I'm now going to hand you over to Peter Simpson, Chief Executive of Anglian Water. Before I do so I'd like to thank you for your attention, I appreciate some of this material has been quite detailed.

Water 2020: the companies' perspective
Peter Simpson, Anglian Water Group Chief Executive

Thank you very much, indeed, David.

Well, good morning, everybody. I'm absolutely delighted to have been asked to speak, today, because one of the things I think that's different now to the past, is we've had a fantastic engagement with Ofwat in the previous price review, a very open dialogue between the companies and the regulator. That's carried on into the thinking about PR19. That's fantastic. I think it can only be good for the sector as a whole. Now I'm here as the Chief Executive of Anglian Water, but all of the companies have played a part in Water 2020, and in contributing to its development, as I'm sure you'll see.



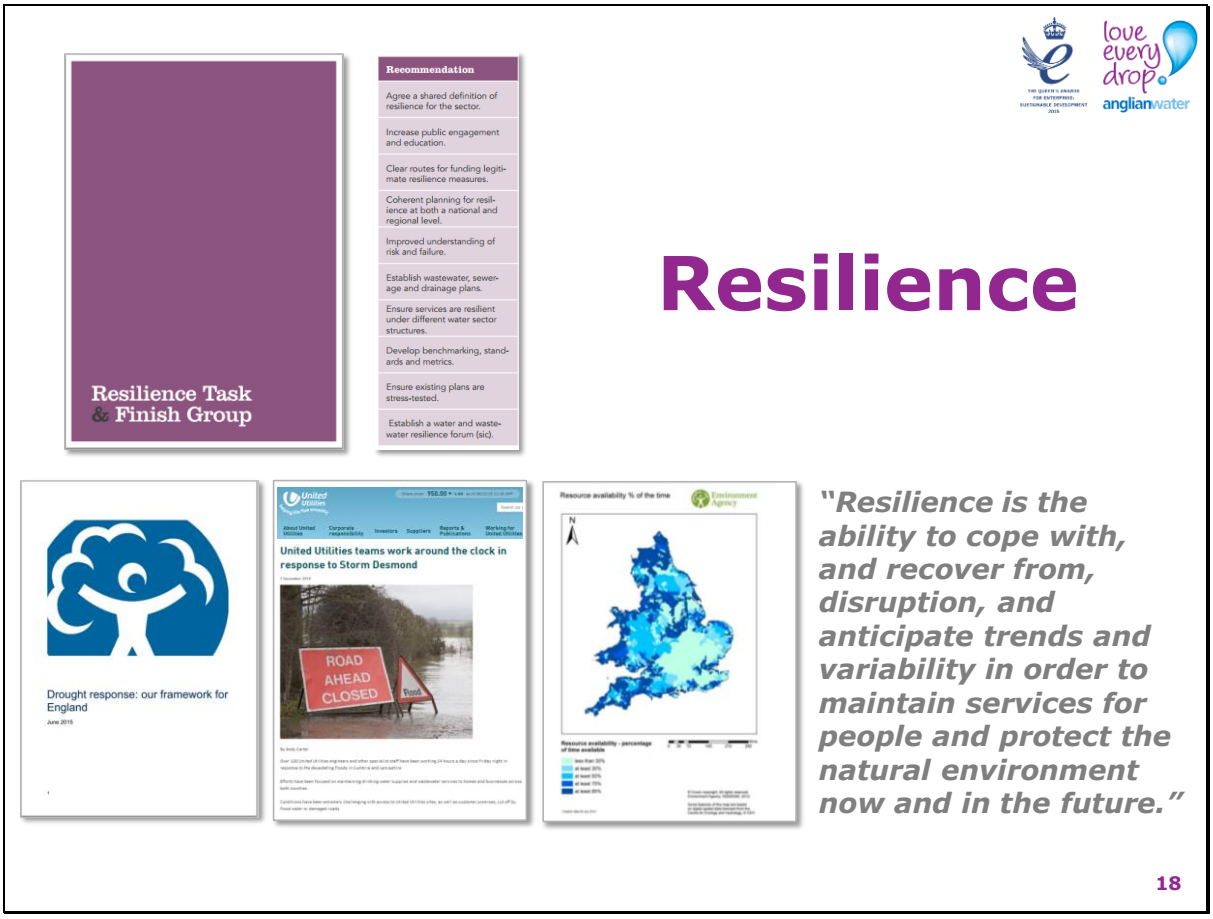
One of the first things to think about is, what are the challenges we face? Now all of the companies developed strategic direction statements some years ago, to think about the long term, to think over the next 25 years, about the sorts of challenges

they face, and how we might respond to them. In fact, many companies, like my own, actually framed their business plans within those strategic direction statements. But what was particularly important for this piece of work was to get some common views about what the challenges are facing the sector. This was a piece of work led by Anglian, United Utilities and Yorkshire Water, but it really brought together all the ideas from across the industry in terms of what those challenges are. I think we've got a good, firm basis and a clear, common understanding of those challenges across the sector between the regulator and the regulated.

The marketplace for ideas has been referenced a number of times. It's a really positive development. In the past, we've seen good practice be adopted and taken forward and promoted by Ofwat. One that always sticks in my mind was the work that Yorkshire Water did at PR04 on customer engagement which really framed that price review. I'd like to think that Anglian's own work around outcomes, through a lot of the stuff we've done on Love Every Drop, helped to influence PR14 on outcomes. There's been evidence of that in the past. I don't think we've ever had such a comprehensive bringing together of ideas in a short space of time, though. With this marketplace for ideas, that's what we've managed to bring to bear. This has been

referenced earlier on. There's some 25 papers; 25 contributions have been made from across the water industry to this. I think it's really important that this is a recognition that the industry isn't looking to Ofwat to define the future for the industry, but the companies genuinely wanted to take ownership of future direction. It was one of the challenges that Jonson posed to the industry some time ago, about stepping up into that space. I'd like to think that's exactly what the industry has done.

Now, the myriad of papers cover lots of really thorny issues. They go to the challenges I've touched on earlier. They go to how we might engage better with customers, how outcomes are developed, how cost assessment and totex and menus develop, the whole issue of access pricing, allocation of RCV, the RPI/CPI debate, the duration of price controls, and markets for water resources and sludge treatment and disposal. It's all of that stuff, the stuff around all of those areas where there have been contributions. I just wanted to pick on three, just to illustrate the level of co-creation that's been going on behind the scenes.



The first one is resilience and it was referenced earlier. There's a primary duty for Ofwat enshrined in the Water Act of 2014. One of the things that Ofwat and DEFRA

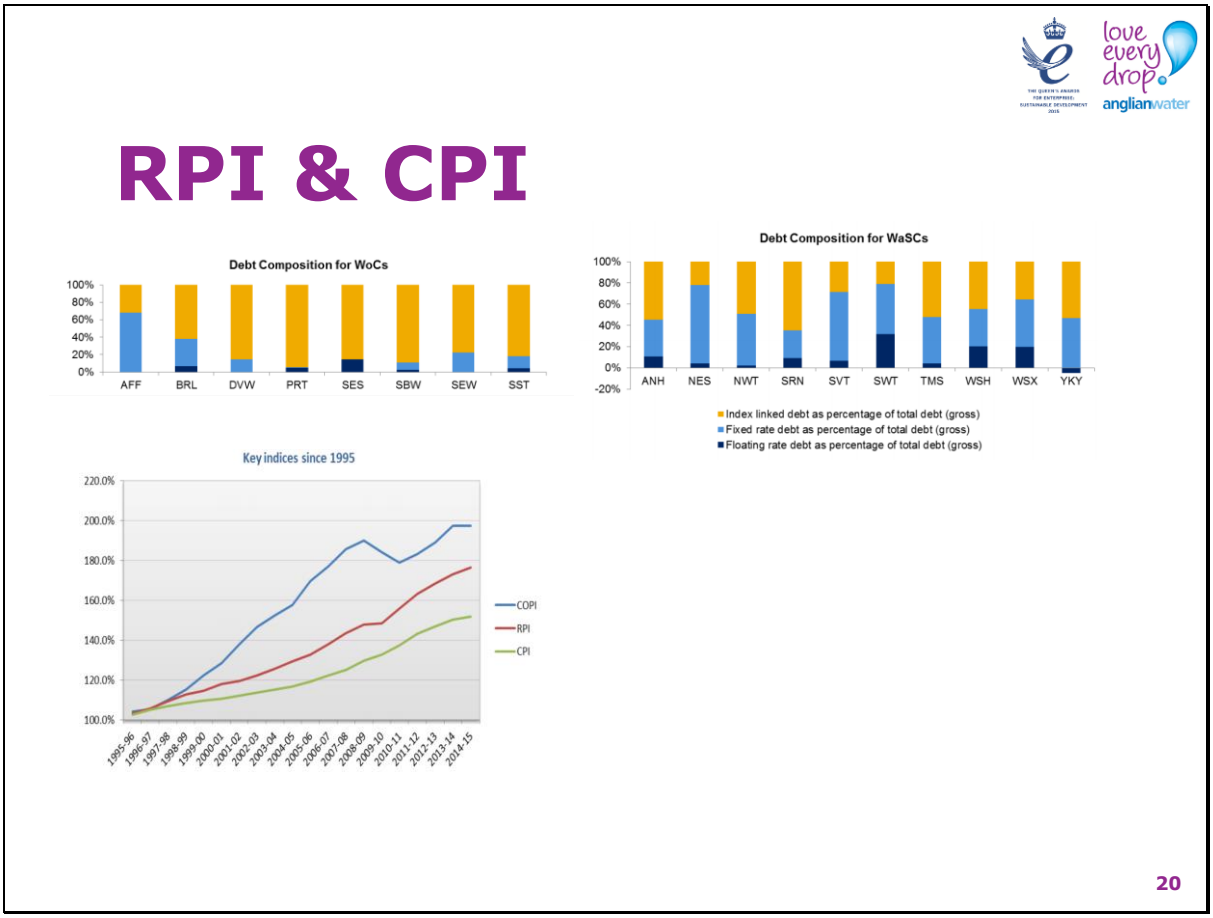
and the industry have been very keen to do is to understand what the heck that actually means. There's a task and finish group that Ofwat set up. It's an independent group. It came up with ten recommendations. The industry were heavily involved with that. Those recommendations have been published. I haven't yet seen some of the reports that are coming out, today, but I'd like to think many of those recommendations have been taken forward. It's stuff like you know, a common definition of resilience for the sector. Things like ensuring clear routes for funding legitimate resilience measures. Ensuring a coherent planning for resilience, at both the national and a regional level. Ensuring that services remain resilient under different water sector structures. What I find is really, really good about all this stuff, though is it's very inclusive. We've worked with Ofwat, the companies worked with Ofwat, DEFRA has been heavily involved and more and more, we're finding we're focusing on a common objective.

In terms of markets and reform, the second area I'd like to touch on, the very first market, the new market that's coming up, of course is April 2017; the market for non-household retail customers. That's something I've personally been heavily involved in over the last few years. I have to say it's a huge effort, this one, which has got broad and wide scale engagement

from the industry and new entrants alike. The setting up of MOSL, the market operating system limited, right at the heart of this market, has been something I think the companies in particular can be particularly proud of. It's a good example of actually what you can do with a market when you get that positive engagement. There's a lot to do. 2016 is going to be a very busy year, but I think it's a very positive sign of just what's possible.

The other areas that were referenced a little earlier, you know, water resources and abstraction reform. A number of these papers that you can see on here, from companies like Severn Trent, from companies like Anglian, have looked at issues like what's the right approach to the trading of abstraction licences? What's the right approach to developing new water resources? In the east of England, one of the things that we've been looking at is, how we actually develop a water resource storage reservoir that's not just owned by the water industry, but it's perhaps owned by others as well. What does that mean in terms of how you allocate the water rights around it? Again, the good news is that's not something we're doing in glorious isolation. It's something we're working with other companies on, other sectors on, and importantly, with the economic regulator.

The other area that was touched on earlier relates to bio-solid or sludge treatment disposal, that whole area. You'll just about be able to see a paper from Wessex Water, one of their contributions to the marketplace for ideas, where we great opportunities as a sector, to open that up and allow the market to play its role. One of the important precursors of that, and this is just sending a message really about how we're trying to get ahead of the game a little bit, was to establish a quality standard for those bio-solids going to agricultural lands. The catchy title, The Bio-solids Assurance Scheme, you might wonder why on earth that one is there. Well, the reason it's there is because actually you have to get the standards right before you can open the market in the right way. The industry has done that. It's taken upon itself to implement that system, that standard, that external assurance of its product. That's only a very positive step along the way. In terms of access pricing and RCV allocation, again, very thorny issues. Much discussion, but in the United Utilities' recent paper, a contribution to the marketplace for ideas, as you've just heard, has been a fundamental part of Ofwat's thinking in terms of taking this forward, which is very positive overall. Severn Trent, before that, equally did some great thinking in that space.



RPI and CPI is the third area to touch on. I won't go into the merits or not of RPI versus CPI. I think there's certainly plenty of evidence around that RPI is somewhat out of date. Of course, a key issue to us is that it's been the heart of economic regulation and price controls since privatisation. Of the £45 billion of debt, £22 billion of it is linked to RPI. But what we, I think, can welcome is Ofwat making it very clear that this move from RPI to CPI will be value neutral for investors. Anglian, as a company, proposed the idea of phasing in the CPI indexation, linking it to that new RCV post 2020, and leaving the existing RCV linked to RPI. I think we've heard some of that in what's been played back to us. I think that's all very, very positive.

Working together: what next?

- Licence modifications
- Cost models
- Market reform
- Ensuring a long term focus

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What next in terms of working together? Well, when I started thinking about what I was going to talk about today, I hadn't heard the Chancellor's announcement on domestic household retail competition. I've now heard that. Clearly, we need to work together to understand the costs and benefits. I know Ofwat has got an awful lot of work to do in that area, and we want to play our part. As a sector, you know, we want to be very mindful of the impact this has on vulnerable customers, the low income households, and about bad debt risks for customers. We have to have a particular focus on them. We also, I think, coming back to the non-household retail market, need to make sure we get that right and do not get distracted. You know, there's a lot of work associated with that particular market. There's probably close to a thousand people in the industry within our supply chain working on that at the moment; we need to get that right. Following Martin Cave's dictum - test and evaluate and proceed step by step with markets - that would sort of lead you to say, get the non-household retail market right. Do it properly, and then move to the next step. That's some perspectives. Of course the views of the investor community should be sought on what the impacts of this are as far as they're concerned.

There are other key areas that we, as an industry, through Water U.K. and directly with Ofwat, need to focus on. Licence modifications that were flagged earlier. They clearly need to be targeted and proportionate to deliver against these Water 2020 aims, but we have demonstrated that we can work effectively together where those changes are clear and targeted. There are other areas about the methodology around cost assessment. Again, Ofwat have agreed that we need to develop together, some robust models to inform the next price view. I think that's all very positive. Clearly, we all need to work on effective market reform in the areas of water resources and bio-solids or sludge.

Finally, I think above all else, we need to ensure PR19 enables us to take this long term perspective that's so important for addressing so many of the challenges that we've jointly identified through this work. Thank you.

Panel questions

Panel

- Jonson Cox, Chairman
- Cathryn Ross, Chief Executive
- David Black, Acting Senior Director
- Keith Mason, Senior Director

Cathryn Ross:
Thank you very much, Peter. I'm conscious that we've talked an awful lot. Jonson talked, I talked, David talked, and Peter has talked. I guess you would like to talk to us a bit, now. I'm going to open the floor for questions and discussion. Who's going to be the brave person to start us off? There's a chap at the back. We've got some roving mics. Natalie's coming to you, now. If you could give us your name and your affiliation, that would be great.

Guy MacKenzie:
It's Guy MacKenzie from Credit Suisse. I just had a few questions, actually. Specifically on the RPI to CPI transition. For 2020, I guess you're proposing this 50/50 split. You explained here, implicitly assuming 100% of industry debt is index linked. I guess future debt issuance is CPI linked, and equity remuneration is effectively CPI linked as well. Just a quick question on that. What happens after 2025? I was wondering. I didn't see the methodology within the paper. I'm not sure it was within the detail, but just give us some clarity there.

Secondly, on the transition, the first option you listed in the consultation was I think what Anglian was proposing, which was to link the 2020 RAV to RPI indexation, RPI inflation, excuse me. Then, all future capex to CPI indexation. You gave two reasons why you dismissed that option. I think the first one was, it would just take more time, I guess 20 to 25 years effectively. The second reason was it wouldn't be consistent with your notional assumptions on capital structure. I was just wondering if you could clarify that second reason, because it wasn't too clear to me that that was necessarily the case.

The final question on this transition ... I think you mentioned in the documentation that there was potential downward pressure on the cost of equity as a result, given the higher relative volatility of RPI to CPI. I guess, given the CAPM framework that you adopt in setting the cost of equity allowance, it's just not clear to me that this would classify as systematic risk, given that it would be diversifiable. It seems more idiosyncratic. I was wondering if you would just give us a little more clarity on your thinking or your analysis of how that would potentially drive lower equity returns.

Cathryn Ross:
Okay. That's a really good place to start. We definitely expected some questions on indexation, so thank you. I think I'll pick up the first one of those. I think, David, if I can ask you to come in on the issue about notional structures and the transition, and the extent to which that reflects that, and also the intricacies of CAPM.

On your first point, you're right. We haven't said what's going to happen beyond 2025. We haven't said what's going to happen in the next price control that we do in 2024. As you would expect, that's a very conscious decision, because we want to leave ourselves the ability to come back to that. Obviously, you've seen the direction of travel that we've set out. You've seen why we want to do that, so you can imagine that we would be interested in pushing further in terms of the 2024 price review, but again, that's part of the conversation that we want to have with people on this consultation as we work through towards that 2024 review. There's no commitments from us at this stage other than that we'll be looking at that again as part of the 2024 review. Do talk to us about that if that's important to you in relation to this consultation. David, do you want to come in on the transition point?

David Black:
Yes. I'll just mention, something on the first point actually, as well. Obviously, this is the beginning of a process. We have referenced the level of embedded debt in the sector. Some of that will unwind as we set price controls. The other point we'd obviously like to look at in future price controls is the development of the CPI market. There is a wider market out there so obviously any view about the appropriateness

of future use of RPI which depends both on development of that as well as our view about the embedded-ness of the RPI linked debt within companies.

In terms of the reference to the notional capital structure, I guess I would take almost the reverse position, which is that the starting point is that you would transition fully across to CPI. We've looked at the reasons why you might not do that, and that is acknowledging the fact that we've had a price control regime, which has had 25 years of embedding RPI linked debt into it. Therefore, there is a need to take that into account when we set our price controls going forward. The reference to the notional structure is just the point that some of this is equity financed, 37.5% on the PR14 assumptions, and also the level of new debt in the sector, so that matched back to that 50% that we referred to.

In terms of the diversifiability or not of the risk, I would note that this is a wider macroeconomic risk, so this is about the interaction of inflation and economic growth. It's not clear to me that it would necessarily be diversifiable, but it's certainly something that we would be happy to discuss further. We are just flagging that there are benefits from moving away from RPI, as well as some of the more obvious points made on costs by some of the stakeholders.

Cathryn Ross:
Just picking up on David's second point there about the transition. Jonson, I wonder if you want to say something about the conversations we've been having with people recently about how a CPI linked debt market might emerge.

Jonson Cox:
Yes. I'm very conscious of all the points we'll get about there not being an existing CPI market. We've had long discussions. We've talked to a range of financial institutions. I've taken part, myself, in some of those meetings, to understand it. We've clearly got a problem of supply and demand and which comes first? It's quite correct. There isn't a deep and liquid CPI market at the moment. Hardly surprising when regulators are not using CPI. I think you come back to, as regulators, I think we are in the lead, but others are moving in the same direction too, that our market will create. You know, we sit in an economy of one the world's most innovative capital markets. There will be a solution to this that will create a deep and liquid, CPI linked market.

I think you come back to, we have a job to regulate on behalf of society. When you have an index which is found to be flawed, and which is not being updated, and is not being taken forward, we cannot discharge our duty to society if we go on, in the long term, endorsing an index that does not have that reliability. I think that you'll find that we've had long discussions about the extent to which markets may evolve,

whether to wait for markets, but how long would you wait, and to what extent, given you allow a transition? We've looked at more radical options than todays, and we've arrived at a proposal which, as Cathryn said, is the proposal we're going forward with.

Cathryn Ross:
Thanks Jonson, thanks David. Right.

Jonson Cox:
I wonder, Cathryn, if there's going to be a lot of questions on CPI, should we get them all out?

Cathryn Ross:
Yes, okay. We've got two more questions on CPI. The gentleman there, and then going to Lakis.

Nigel Hawkins:
Thank you very much. Nigel Hawkins, EGR. Just on CPI. Could we just establish how the government's triple lock uprating for the £80 billion pension market is updated each year? Is that RPI or CPI?

Jonson Cox:
You may know better than me, Nigel.

Nigel Hawkins:
I thought it was RPI. I stand to be corrected, but bearing in mind Mr. Black said it's little used. It's used for the £80 billion annual pension market...

Jonson Cox:
Yes.

Nigel Hawkins:
I would have thought that “little used” was being a bit disingenuous.

David Black:
I don't think so. If we go back to inflation targeting for the U.K. economy as a whole. We could play this game all day, I guess, but yes, that's been CPI. There's been a lot of other government benefits which we moved over to CPI, so the triple lock is a relatively unusual feature of the market. It is a question about, what do customers recognise? Indeed, the experience with Scottish water customers is when they're engaged with is that they definitely preferred CPI, so I don't know.

Nigel Hawkins:
That's why I suggest that the triple lock is checked.

Jonson Cox:
Can I just come back, Nigel? Number one, remember we are starting from the customer legitimacy point, as David said. Secondly, in our discussions with financing institutions, on the private pensions market, I came away with the view that a little under a quarter was CPI linked, a little over a quarter is RPI linked, and about half was some blend of RPI and CPI linked. Remember, an awful lot of the capital invested in this sector is not U.K. money. Let's just remember that when we get into the discussion.

Cathryn Ross:
I think, Lakis, you had a question as well. You've got the microphone, there. Just in front of me.

Lakis Athanasiou:
Lakis Athanasiou, Agency Partners. You mentioned that the risk of RPI debt versus a CPI indexation of the RAV is the main factor that's driving you to partial indexation. Can you touch a little bit on how you went about quantifying this risk? Did you look at things like just the notional structure? Was it the existing notional structure, or did you go to a new notional structure? Did you look at companies' actual debt, like the highly levered ones? How did you go about quantifying this risk?

Cathryn Ross:
I mean, the short answer ... I'll allow David to give the longer answer in a minute. The short answer is both. Obviously, our primary focus is on notional, because as David said earlier, we're very, very clear that the deviations from that notional capital structure, are decisions for companies and for investors to take, at the risk of equity. Of course, we do also have a financeability duty. We do need to look at, and do a cross check, on actuals. That's very much what we've done. David, do you want to say more.

David Black:
I don't think there's much more to say on that. We have looked at the notional structure. Clearly, the notional structure is something that we revisit at every price control. We've obviously referred back to the PR14 notional setting, but the acceptance of that may change over time. We have looked at the actual exposure to companies. I guess there is some interesting questions about you know, what the price of hedging might be. There is, I'd have to say there's significant uncertainty about that because of the immaturity of the market. You know, it would be nice to have an answer to say it's worth X percent, but I think that's not quite the sort of

place that we're at. We just have to acknowledge that there is this potential risk there.

Lakis Athanasiou:
Which would stop you going to CPI altogether? It could be very small, but you seem to be suggesting you haven't actually looked at it. You're just saying, "There's a risk," and "Oh, dear." Have you looked at it? Or you just looked at two separate numbers and are saying, "Oh, there's a gap."

David Black:
It is something that we've done analytical work on. We are actually doing work ongoing on this as well. In answer to your question, what we have done is we have aligned our notional embedded debt with RPI, so there isn't any additional risk going on in the sector because of that. Whether or not you quantify the number as X million pounds, doesn't change that proposition. That risk has been covered for the companies. What remains is any risk that they've taken through their particular choices about financial leverage. In answer to your question, it seems to be a somewhat hypothetical question looking for a hypothetical answer.

Cathryn Ross:
Lakis, one more and then I think we'll go on.

Lakis Athanasiou:
It's not a hypothetical question. It's a question ... You're saying there's risk between RPI and CPI on debt. It seems like the best way of doing it would be some kind of simulation Monte Carlo, but you seem to be saying you haven't looked at that.

David Black:
No, we have looked at that. We have also spoken to people about what the cost of hedging would be, which is actually the cost that we would be interested in because that is the cost potentially to the sector. You can argue that cost should be borne by equity holders. You could argue that there could be a role for customers to play. That's our approach, which has been to look at what kind of cost that would be. This would be a new cost to the sector from the change of the approach to indexation. We think our approach to indexation avoids that cost, and therefore, isn't an issue.

Cathryn Ross:
Right. I am going to move us on, now. I am definitely going to move us on. The gentleman in front of Lakis.

Iain Turner:
Yes, Iain Turner from Exane. Next summer when you're at the CMA because one of

these highly levered companies has declined to accept your licence change on CPI indexation, and the CMA asks you about the cost and benefits of this change and you have said that it's pretty much revenue neutral, so I guess that means the benefits are pretty limited, but there is clearly a cost. How do you answer that question when you're asked it?

Cathryn Ross:
Well, okay. It's important to realise a few things there. Yes, you're right. It will need a licence change, so that's one of the suite of licence modifications that we're looking at. As Peter said earlier, our intention is to work with the sector on getting consensus for those licence changes, so I repeat, this is not about working backwards from the inevitability of all ending up at the CMA. We don't want to go there. The sector doesn't want to go there, and our intention is to work together to agree licence modifications. We completely accept this is going to be a large part of that discussion, no doubt about it. Okay, let's think about how the CMA thinks about this. Well, the test at the CMA is a public interest test, so what we have to establish at the CMA is that the licence modification that we're proposing is in the public interest as compared to what we have. I think you can see from what we've set out today and we've got further information and documents that are on the website, now, how we're going to make that public interest case.

Obviously, this is a consultation and one of the things we're hoping will come back from this consultation is further evidence, further argument, and further analysis on both sides which will then build into that case. You can see from what we've said that we do think the balance of the public interest lies in making the licence modification to move to CPI. Now obviously, we've said already that what we're proposing in the document we put out today, I think is a pretty balanced package. We do think the public interest suggests moving towards CPI, but we are mindful of the impact on the sector. We are mindful of the impact on companies' current finances. That's why we're proposing the transition mechanism we are. It's not going hell for leather, you know, moving toward CPI overnight and disregarding the consequences. We think it's a balanced package. That's what we'd be saying to the CMA. Jonson, you want to come in?

Jonson Cox:
Yes. Can I add another point? We are held to account, rightly, by a group of interests. You're right, someone may decide to see us at the CMA. We will answer them that what we've done is in relation to the public interest. Let's think of another test that we're held to. The investment community is very vocal in this, but take the customer community that is not so vocal, for whom it's a big issue. We've just been through one of those exercises that regulators don't like, of being held to account by the National Audit Office. Cathryn has to go to the Public Accounts Committee, and

that's all gone well. If we fail to plot out a reasonable and proportionate way of adjusting to an issue, that the index that has prevailed for 25 years is no longer a reliable index, you can foresee us being held to account by Parliament or by the Audit Office for not actually having taken on an issue that is important to society, that customers' incomes are linked to CPI.

It isn't as if we have lots of optionality. We have to address this issue. We believe that what we've put forward is very fair, very proportionate and we can stand the test of any challenge that will come to us. No one will think it's perfect, what we've done, but we can stand in front of the whole range of those who hold us to account, and say, "This is how we've taken it on, and this is what we're going to do."

Cathryn Ross:
Thanks. Right. Okay, there's another question towards the back, more or less in the middle. Natalie is coming to you with the microphone. Okay. Great.

Mike Osborne:
Mike Osborne, Corsair Capital. You mentioned that you'd be looking at one, debt indexation and two, a potential pain/gain share on the cost of debt within the WACC, something along those lines. Now, this is a question about process, primarily. I understand this is not part of the current consultation. If so, what is the timeline for that?

Cathryn Ross:
Okay. Lest I get it wrong I'll ask David to talk about the timeline. You're right. It's an important issue, and it goes back to what Jonson was saying before. We've all seen the debates about cost of debt. It was writ large in the NAO report, it has been out there for a while. We do need to think about it. I think there were three elements to it. One is this question about index linking the cost of debt, which ultimately is about who bears the risk of the difference between the outturn in actual debt prices and what we assume at the time of the review. Secondly, there is an issue, as David flagged, about financial outperformance and how that's shared and when that's shared with customers. We're conscious we have sharing mechanisms there for other aspects of cost outperformance, we don't currently have that for financial outperformance, so we'll have a look at that.

Then the third element that we need to have a look at is actually how we reach our view on the appropriate cost of debt at the point of the price review. We're really conscious. We haven't got this graph, but there is a graph that shows this fairly starkly. If you look at our assumption on cost of debt, at every single price review over the past 20 years, as compared to outturn, we've overestimated. I think that's

telling us we need to look again at how we do that. There's three elements to what we're looking at. That will be happening next year. David, what's the timing on that?

David Black:
Just in terms of the sequencing of this, one prior issue that seemed very important to us was the term of the price controls as we have proposed, today. We're proposing to stick with a five year term. That is quite closely linked to questions about the risks around indexation, so we wanted to take that decision and look at that approach first. Then, in the first half of 2016, so by the middle of 2016, we expect to be able to reach a view about the role of potential debt indexation. This is not going to be the end of the issue, though, because obviously, the approach to the cost of debt is also something that we picked up in the methodology statements which will come later in 2017. In terms of the question about whether or not you might use indexation to address this issue is something that's relevant to company licences, as well, so therefore an issue that we would like to address in the first half of 2016.

Cathryn Ross:
Thanks. Right. Okay. Because you had one question, I'm going to go to the lady over there. There on the second row, near the front, third in. I'm afraid it's on your side, again. Thanks.

Deepa Venkateswaran:
Thank you. This is Deepa Venkateswaran, from Bernstein. I have two questions, one on CPI. Jonson, I was wondering whether you had any discussions with Treasury on whether they intend creating a liquid market for gilts which then could be the underlying basis for more private sector CPI debt? The second question is on the licence modifications, I noted that there was a clause that you wanted licence modification for in-period adjustments. Could you just help me understand, was that related to CPI or not?

Cathryn Ross:
Okay. Jonson, you want to-

Jonson Cox:
Clearly the discussion on CPI indexation would be much easier if we knew what the Debt Management Office's plans were in relation to gilts. We don't. It's not for us to influence... I should think financing institutions may have more influence over that than we do. I have nothing, I'm afraid, to add to that.

David Black:
Just on the question of the licence modification and in-period adjustments. That is referring to things like outcome delivery incentives. In PR14, three companies

proposed changes to their licences to enable this. We would like to see that extended to the rest of the sector. We think it's important that incentives payments are aligned with actual performance. The timing of incentives also matters in terms of the impact on company management. We are also looking at the wider question, about whether things like cost outperformance should be taken in period. This is a more difficult issue. Clearly things like totex and deciding whether or not you've got outperformance in a particular year, can be more of a challenging question. There's a range of potential issues there. We are very keen to see the in-period adjustments though extend to the use of ODIs. It's also part of our approach of trying to avoid a huge adjustment every five years when we reset the price controls. We think there are good reasons for moving to this.

Cathryn Ross:
I just want to take the opportunity to amplify that point. As you kindly brought up the issue of in-period adjustments. You heard us say that we're not proposing to change the length of the price control. We're proposing to retain a five year wholesale price control, but you've also heard us talk about putting greater emphasis on the long term. I can imagine why you might think there was a degree of inconsistency or tension with that. There really isn't. There isn't because of the other aspects of the package that we're proposing with this suite. Yes, you could move from five years to eight years or ten years. You absolutely could, but there is a risk that if you do that, you're essentially putting more weight on the adjustments and the resets that happen at the price control. Therefore, actually you're creating more of a cyclical effect.

I think what we want to do is go in the opposite direction and actually enable and encourage companies to manage their businesses in the best long term interest of their customers on an ongoing basis. That's why we're putting emphasis on things like in-period adjustments, so it kind of reduces the sort of the focus on the five yearly true ups because you're doing things more gradually. It's also why we're flagging now, and we'll say more about this later on, next year, that we really want to put a lot more effort and weight onto customer engagement by businesses with their customers in period, which we know they do, anyway, but not just on the development of the business plans every five years for the price review. It's part of a suite of things that are aiming at getting at that longer term management of companies in the best interests of their customers with less emphasis on the five yearly true ups and resets. It's an important part of the package that. Right. I'm conscious of time. I'm going to take two more questions. I think there was a chap there on the second row, and then on the first row. Then I think we need to close. If you can get the microphone across. Thanks.

James Brand:
It's James Brand from Deutsche Bank. Just two questions. You've obviously been

pretty clear about the areas where you're looking to introduce more market forces in the next price control. Have you thought through all of the other areas and decided that they don't justify introducing more market forces at any point in the future? Or would you envisage you know, getting into the next price control and then thinking, "Right. Well, what else can we introduce more market forces in?" The second question is just on water resources. Obviously there are some areas there where there are potentially long term investments being made. Can you just go through how you think about, you know, perhaps the risk of stranding of those assets and whether or not that just might discourage investments, and how to deal with that.

Cathryn Ross:
Yup. Good questions, both. On the first one, you'll see that discussed when you read the document. We have deliberately focused our attention in terms of where markets can add value, on those areas where we think the cost benefit is clear. The areas like sludge treatment and disposal, the area of water resources, there is a really lively conversation in the sector among government, among other stakeholders, about that. There is a clear direction of travel. The challenges are clear. How people might do things differently if they were only enabled to do that if the regulatory regime frankly got out of the way is fairly clear. We don't think we need to make big changes there with significant costs in order to deliver really substantial benefits. In a sense, we're proceeding on that basis, on a sort of no regrets basis. Is that the last word on the subject? Well, inevitably, not. I mean, things move on. Technology moves on. I mean, you heard David saying earlier, you know, one of the reasons why we're looking again at sludge treatment and disposal is because of technological change. Well, who knows what further technological change will throw up in five or ten years' time that might prompt us to look differently. Right now, these two areas, water resources and sludge treatment and disposal, I think there's a consensus that we can add value there, essentially by regulation facilitating those markets.

Then, I think your second point on water resources, again I mean I'll ask David to come in. I think the approach that we're taking there firstly, and it's important to realise this, is aimed at getting companies to make the most efficient choices about new water resources rather than reaching back in and stranding existing water resources because that would be daft. Also, it was on one of David's slides, you'll also see that we are not proposing, through the price control for water resources, to expose companies to volume risk there. So there is a mitigation. David.

David Black:
Yes. On that, in terms of market force and resources, we see that really very much about the market at the point of procurement in terms of what happens to the assets, so we do see the water resource price control being an RCV based price control, so an RCV being created. We are keen to explore further the United Utilities proposition

of long term contracts that could potentially stand in for the RCV. We think that's an interesting idea. However, it is a question about the practicalities of how that would work, and whether the market would be ready for that at this point in time. It will either be an RCV based approach, or an approach which allows for long term contracts.

Cathryn Ross:
Right.

James Brand:
Thank you.

Cathryn Ross:
Dominic, you get the last question.

Dominic Nash:
Hi, it's Dominic Nash from Macquarie. I've got two questions, please. The first is on RAV or RCV. You say you're going to protect the 2020 RCV, but 11% of your total RAV is going to be in full flung competition from 2025. I think, in your documentation, you're talking about a true up to make good on the RAV going into 2020. How do you sort of square the circle, then, on those who do better? Would they have to give money back? Those who do worse, what incentive is there on them to actually perform on those existing assets? The second question is, you talk about a £1 billion pound benefit for consumers. Have you got any assumptions in this benefit for an increased cost of capital?

Cathryn Ross:
Right. Okay. I'm going to ask David to come in on both of those. I mean, the first point I want to make really, really clearly on the RCV, because this is really important, we are saying in this document that the RCV, as it exists at the 31st of March, 2020, will benefit from enduring protection. That's really, really important. We're not proposing in 2025 then to come back and say, "Oh, well actually, let's think again." The RCV, as it exists 31st of March, 2020, benefits from enduring protection. David.

David Black:
I think you're right to identify that there's a potential issue here with maintaining incentives on companies when they've got their RCV protected. We think it's less of an issue for sludge due to the depreciation of those assets will be faster and the RCV depreciation will be set to align with that so there should be, I think, plenty of skin in the game for companies. It is something we will have to look at and is there some balance of pain sharing there in order to keep incentives right.

In terms of the £1 billion, this is just based on a study of potential scope for more interconnectors. In terms of the impact on the cost of capital of the changes, we're also releasing alongside this paper quite an extensive report from PwC which has looked at the potential implications for risk and the WACC for the various implications of our regulatory framework. The view is that there would be no increase in cost of capital for future water resources. Therefore, that relates to the £1 billion pounds.

Cathryn Ross: Right. Thank you very much for all of those questions. I'm sure it won't be the last word on the subject. I'm sure we'll continue to talk over the next few months, but for now, I'm going to hand over to Jonson just to close the event.

Closing remarks
Jonson Cox, Chairman

Thanks Cathryn. Thank you to all of you. Thank you to all of you across the sector who've helped us in this journey. I'm going to be very quick. I do just want to say there are six members of the Ofwat board here, and many of our colleagues who worked on this. I know Ed, you wanted a question, and if others want a question, we are all around afterwards to answer any questions. You've heard our proposals. It's a package in the round that we've put on the table. I just have six quick points I want to make about things that will continue to characterise the way we approach our role as an independent regulator.

The first one, which you heard eloquently from Cathryn, affordability matters and will continue to matter. The second is linked to that: doing more for less will continue to be core for PR19. As Cathryn indicated, looking forward, the allowed return may well be lower than it is, today, particularly because of the embedded debt cost, but it's unlikely to fall at a rate that means we can absorb additional expenditure just like that. I reminded you of the WACC that was on the Thames Tideway. All that means that dynamism in the sector, in the way that companies strive for and reach the frontier, remains very important. The frontier assessment, as we have said, is likely to be more dynamic. Those who fall behind will find the going is much harder than they found hitherto in this sector.

Then, structural change, which you've heard about in relation to water resources, in relation to bio-solids or sludge treatment, is likely to play a bigger role in meeting challenges going forward. You saw on the slide, productive efficiencies have come down by about 75% since earlier reviews. We have to think how to drive efficiency from more dynamic approaches, more use of market mechanisms. In that context,

we see already the beginning of a market for anaerobic digestion as the predominant way now of treating sludge and we see real competition; opportunities and markets for the product of anaerobic digestion, gas and fertiliser. We welcome the government's competition plan announced last month, which wants open and competitive markets for the reasons of innovation and efficiency.

I just need to remind you that underpinning all this is of course, we want less intrusive regulation, but that relies on companies and boards in particular. And our principles of board leadership remain very important, and will remain subject to review, the first review probably being next year. These principles set out the foundations for the reliance we put on boards to challenge companies to put their best foot forward, best and final propositions, and assurance for what we're doing. That will remain an important driver as we go towards PR19.

I think at that point, that's my quick points. You recognise our job to challenge companies to move forward in the interests of customers as well as all their other stakeholders. The key theme of our approach is the continued focus on customers who are at the centre of what we do. The changes you've heard about today, build for PR19 on what we did for PR14. We think there are benefits in there from those reforms of regulation, benefits for all stakeholders in the sector. As we said earlier in the session, both Cathryn and I, this is a dialogue. We are listening, but it's also a firm proposal on the table and it's a package as a whole that is on the table. We have heard there's some bits still to come around debt indexation, around the treatment of debt, and the sharing of out or underperformance for the next period. We look forward to continuing constructive engagement. As I said, there are many of us from Ofwat here today and we're happy to carry on the dialogue with anyone who didn't get a question answered and would like to. Thank you once again, both those of you on the webcast and those of you who are here in the room. Thank you.