
Putting customers at the centre of a regulated monopoly sector

Speech by David Black, Competition Matters 2017, Wellington, New Zealand, 20 July 2017

Introduction

Good afternoon.

I'm David Black, Senior Director of Water 2020 at Ofwat – the economic regulator of water and wastewater services in England and Wales.

Thank you to the NZ Commerce Commission for inviting me here to speak. It's great to be back in Wellington and be part of this very impressive event – rare to find a conference with such breadth and diversity of speakers on competition and regulation.

I'm here today to talk about putting customers at the centre of a regulated monopoly sector – in our case, the water sector in England and Wales, but hopefully it will have wider relevance to issues that you face.

At Ofwat, we've been on a journey involving the role of customers within the sector. Today, I will discuss the challenges facing the sector, and how we redesigned our approach to regulation to put customers at the centre in our most recent price review in 2014. What we learned from

the experience and our approach is evolving for our next price review in 2019.

Ofwat's strategy is based on the vision of customers and wider society having trust and confidence in water and wastewater services.

Why trust and confidence?

Water is vital to our way of life, economy and environment and the loss of trust in something many of us take for granted every day could have significant impacts. Trust is something that is hard won but easily lost. In recent years, trust in many key institutions such as businesses, government and the media has declined.

In this climate, it is more important than ever that institutions delivering essential services are trusted. Water and wastewater providers, regulators, government and others need to work together to build trust by placing people and their needs at the centre of everything they do. UK customer research suggests a strong link between customer service and trust and so we see customer engagement as central to the delivery of our strategy.

I'll come onto what we're doing about it shortly, but first a little background on the water sector in England and Wales....

Water sector in England and Wales has come a long way

Most people in England and Wales receive their water and wastewater services from one of 17 regional monopoly companies. They range in size, 10 provide both water and wastewater – while 7 provide water only (with the relevant wastewater company providing that service)

There are some smaller very local companies that also provide services on ‘competition for the market basis’ for new developments (new appointments). Since 1 April 2017, business customers in England have been able to choose their water and wastewater retailer, following the opening of the business retail market to competition.

The largest 17 companies invest about £45 billion (or around NZD \$80bn) every five years. Responsibility for ensuring that expenditure is efficient and aligned to the interest of current and future customers lies with Ofwat.

Ofwat was set up in 1989 to make sure the new private natural monopoly companies delivered on the promises of privatisation. Higher standards of service for both customers and the environment funded by customers and financed by the financial markets rather than through the public purse.

Ofwat is an independent economic regulator, established by statute. It has a board appointed by the Secretary of State. It regulates the water sector in England and Wales, alongside the environmental regulator, the Environment Agency and Drinking Water Inspectorate (DWI), the regulator of drinking water quality. Ofwat is also the competition authority for the water sector. Ofwat is not the water regulator in Scotland or Northern Ireland, both places have separate regulatory institutions. There is also a statutory body, Consumer Council of Water or CCwater, to represent the interests of customers to Government and the regulators and also handles customer complaints. The Competition Markets Authority, is the appeal body for our regulatory decisions, all our price review decisions, can be appealed by each water company.

Before privatisation in 1989 – Britain was known as the “dirty man” of Europe, low environmental standards and poor drought resilience eg resulting in standpipes being used in 1976 drought

As a regulator, in the early years we drove investment and greater efficiency through the five-year price reviews. And it worked. As customers and citizens we now enjoy better services and a cleaner environment.

- Compared to the early 1990s, customers today are about eight times less likely to suffer sewer flooding and five times less likely to experience unplanned water supply interruptions.
- A 99% reduction (338,000) in customers at risk of low water pressure, since 1990
- Leakage is lower – it has fallen by 40% from a peak in 1995
- Asset health is in a much better state – most companies reporting stable asset serviceability measures.
- Water and environmental quality has improved – more than 100 Blue Flag beaches and fish in the Thames again
- Capital expenditure has doubled since privatisation

Bills have increased by more than 40% - most of increase occurring in first five years when Government set first price control. But more than £130 billion has been invested. Companies are more efficient (particularly on operating costs) – bills are 30% lower than they would have been.

But the sector faces significant challenges

The sector faces challenges from climate change and population growth:

- Based on a report by the UK Met Office, a current winter 1 in 100-year daily rainfall event in London is predicted to become a 1 in 42-year event by the 2040s
- The populations of England and Wales are projected to increase by 7.2 million (12.5%) over the next 20 years
- Areas where resources are already constrained, such as, London, the east and south-east regions are projected to grow at a faster rate than many other parts of England and Wales

These challenges come on top of water scarcity, particularly in the South and East of England. The Environment Agency is reducing abstraction licences for all abstractors including the public water supply, resulting in large reductions in available abstraction for companies in South East England.

The sector also faces rising costs from tightening environmental standards requiring high capex/expensive end of pipe solutions, yet water company are often of decreasing relevance in terms of drivers of poor environmental quality (much of pollution from other sectors such as farming).

The efficiency gains made by the sector as each price review have been rapidly diminishing as the low hanging fruit from cutting opex following privatisation has been exhausted. From close to around £40 off bills in 1999, to around £10 in more recent years.

Refocusing the sector on customers

Following the 2009 price review, there were a number of reviews of Ofwat and the way it regulated. The Grey review of Ofwat and consumer representation found that Ofwat's approach to regulation was too prescriptive and encouraged companies to focus on Ofwat rather than customers. The Cave review for the Government recommended increasing the role of competition and markets in the water sector. The Walker review looked at fairness and effectiveness of charging.

The reviews were closely aligned to Ofwat's internal rethinking of its approach to regulation. We decided to refocus our approach to regulation by putting much greater emphasis on role of customers, reducing the prescriptiveness of regulation and putting onus on companies to take responsibility.

As part of the regulatory reboot, for the 2014 price review, Ofwat redesigned its approach to setting price controls to incentivise companies to take ownership of their plans and to engage with their customers.

The key elements of PR14 were:

- The introduction of a risk based review as the first stage of the price review process;
- A focus on companies engaging with their customers and developing business plans based on this engagement
- The move to an outcomes and total expenditure (or totex) approach
- Aligning returns more closely to operational and service performance.

There were other elements of PR14 as well, which were aimed at promoting the introduction of new markets such as the market for retail

business customers, which opened in April 2017. As part of these changes we introduced four new price controls, two retail and two wholesale, which helped separate potentially competitive and monopoly elements of the value chain, as well increasing transparency and allow more targeted challenge to cost efficiency. My focus today is on customer engagement, so I won't talk about the competition aspects of PR14 further.

Our model for enhancing customer engagement was based on companies taking responsibility for understanding their customers needs and developing business plans to deliver on these needs ie customer engagement includes two points – finding out what customer prefer and finding out how to best meet these preferences.

In a well functioning competitive market, the competitive process is intended to drive companies to understand what customers want and deliver this. In a world of monopolies, there is no drive towards this.

In the case of essential services and public utilities, there is the temptation to think we know what customers want. However, the price review determination establishes the price and service package for customers – and all packages involve various trade offs of service and affordability both now and in the future. So in the absence of a good understanding of customer preferences, it seems unlikely the regulator will arrive at the right conclusion for customers

The role of customer engagement was not explicitly addressed when RPI-X price cap regulation was established – probably less relevant in sectors where it was assumed that competition would emerge and ultimately replace price cap regulation. In the case of enduring monopolies like much of the water sector, the dynamic of price controls

over time means that subsequent review would capture efficiency gains revealed in the previous price review period, but there no obvious means of inferring customer preference and incorporating within price review settlement.

The issue was compounded by the approach of many regulators, Ofwat included, who introduced service terms into price review determinations. This was well intentioned, otherwise, the regulated company might be incentivised to reduce service rather than improve efficiency in response to the price control. It did, mean, however, that the company was now financially incentivised to response to the regulator's definition of service rather than what mattered to customers. Or in the other words, the approach was effective, if the regulator understood what mattered to customers.

It is far from clear that this is the case, regulatory bodies by definition are small and specialised, often remote from customers. They are not in day to day contact with customers, nor are at the frontline of service delivery. In short, they are not well placed to assess what customers want or how to best deliver it.

Ofwat's approach to addressing the issue in the 2014 price review was to place onus on companies to engage with customers and to reflect this engagement in their business plan, with independent assurance on the quality of engagement provided by company specific challenge groups.

An alternative approach to customer engagement is the negotiated settlement approach. This approach was developed in the UK by the Civil Aviation Authority for use in airport regulation and has subsequently used the Scottish water regulator, Water Industry Commission, to regulate Scottish Water.

Under the negotiated settlement approach, a group is established to represent the interests of customer. This group then negotiates a settlement with the regulated company, sometimes with guidance from regulator in its views on issues such as the allowed return or cost efficiency. If the parties are able to reach agreement successfully, then the regulator endorses the agreement via the determination process, if it fails, the regulator steps in and makes the final determination. This is the threat defines the bargaining power of the parties.

So why not a negotiated settlement in Ofwat price controls? Firstly, there was no obvious representative of customer interests. Independent retailers did not exist at that point and still don't for domestic customers. Secondly, even a representative customer group faced many of the challenges that regulators face in understanding what customers wanted. Understanding the different and changing preferences of customers is not an easy task – not necessarily one solved by establishing a new committee or tasking someone else with representing customers. We really wanted companies to engage directly with customers and do much more to understand their preferences and reflect them in their business plan.

Another reason was that we felt that as a regulator there are some aspects of the determination such as assessing efficient cost and setting allowed returns where we have a comparative advantage over customer groups. It is the preferences of customers about quality of service and the trade off between quality and price and the link between customer behaviour and outcomes, where the best value of customer engagement lies.

A third issue was the practicalities of fitting a customer engagement process inside our price review determination – there needs to be

sufficient time for Ofwat to reach a draft and final determination if negotiations break down.

Our approach was to make customer engagement a key focus for companies in developing their business plans. We required each company to establish a customer challenge groups (CCG) to provide assurance on the quality of companies engagement with its customers. We required a report from CCGs to Ofwat be presented alongside company business plans.

CCG includes representatives of NGOs and environmental agencies, customer and social groups and CCWater. CCGs were not intended to represent customers. Rather the CCG was intended to provide assurance around the quality of a companies customer engagement and that proposed outcome commitments and incentive rates reflect customer views and their wider priorities. Ofwat remained responsible for determining prices and services levels.

The focus on customer engagement was supported by the move to an outcomes based approach. Companies engaged directly with their customers to develop outcomes – and outcome performance commitments – which reflected what companies will deliver for customers.

Outcomes consisted of three elements – the high level statement of what companies aimed to deliver for customers such as secure and reliable water supplies. The second level was the outcome performance commitment – which is a specific commitment to deliver for customers eg supply interruptions of no more than 8 minutes per customer per year. The final element is the outcome delivery incentive – the reward for exceeding the committed service level or penalty for falling short.

- Performance commitments reflect customer preferences.
- ODIs reflect customer willingness to pay for improved service.

Not all performance commitments had financial incentives, some reputational only incentives. Others were penalty only, where customers funded a specific level of performance and there is little evidence that they were willing to pay for better service. An example might be an asset serviceability measure, provided asset is stable condition, there may be little benefit in further improvement. Other performance commitments had both rewards and penalties. Penalties where companies failed to deliver efficient service level and rewards where company delivered better service, in line with customer willingness to pay.

Another new element of the 2014 price review was the risk based review, which was introduced to encourage companies to engage with their customers and submit great plans. It was intended to encourage companies to move away from submitting “opening bid” draft plan to submit “best offer” first time. Rather than submitting a padded business plan and aiming to haggle with the regulator, companies had a one shot opportunity to demonstrate their plan was in the customer interest.

The RBR capitalised on a feature of the sector – despite the companies being regional monopolies, that tend to be competitive with each other, eager to be at the top of league tables and company board often hold their management to account for relative performance. So the RBR was aimed at stimulating competition to produce the best business plan. It is a good example of the exercise of soft power.

Companies that demonstrated their plans were in the best interests of customers were eligible for ‘enhanced’ status. They received direct

financial and reputational benefits and benefited from the certainty of an early draft determination.

The financial benefits were relatively modest – around 20bps or 0.20% return on cost of equity. The procedural benefits were significant – companies received an early draft determination – in effect, they got to deliver their business plan, and a head start on moving to implementation, 9 months ahead of process for final determination. The reputational benefits were also significant, companies could demonstrate to investors and wider stakeholders that the regulator had endorsed their plan.

All other companies who had not obtained enhanced status were required to go away and revise their plan in those areas which they had failed in RBR.

The consequences of the risk based review extended beyond the final determinations. We created our company monitoring framework, which assesses our confidence in each company's reporting and information. And the starting rating for each company was a function of the outcome of the risk based review.

The RBR process was highly successful – particularly in improving company ownership and reducing regulatory burden. And we are developing further for the next price review in 2019.

Alongside the introduction of an outcomes approach we moved to a total expenditure or totex approach to determining the level of efficient cost. Totex is simply adding capital and operating expenditure together. It sounds simple, but has proved powerful as well as challenging to implement. The traditional split of capital and operating had result in a bias towards capital expenditure.

This is because it is much easier to compare operating costs across companies, so improving efficiency for regulated companies generally meant reducing operating costs. Capital expenditure was added to the regulatory capital base and in turn a growing regulatory capital base was prized by investors. This led companies to favour approaches to addressing issues by capex heavy schemes rather than most efficient from whole of life totex perspective.

So moving to totex allows companies to make investment decisions on what is the most effective solution. When combined with outcomes approach, companies had considerable flexibility to pursue the best solution in the customer's interest.

Companies would be held to account by their performance commitments, if they could find lower cost ways of delivering on these commitments, then they could adopt these solutions. Both companies and customers benefited from the cost savings during the period and then the lower costs would be reflected in cost allowances set for future periods.

We also used independent baselines to set cost allowances, which removed link between business plan cost information and cost allowances. Instead, we used econometric models based on cost data for the whole sector to set efficient cost baselines for each company based on upper quartile cost efficiency. This contributed to encouraging companies to submit efficient business plans – as padding their own plans had little bearing on their allowed cost.

Risk and return. In order to better align the interests of investors and management with customer interest, we aimed to put greater weight on operational outperformance and less on financing. Since privatisation,

investors had traditionally earned greatest reward from their creative financing structures rather than running the business well.

The complex and highly geared structures potentially reduced legitimacy of the sector in customer eyes as well as reducing financial resilience of the sector. The outcomes framework with ODI rewards and penalties along with sharing of cost out and under performance meant that higher returns could be earned by improving performance.

So how did go?

The risk based review produced some surprises. Two out of (the then) 18 companies were recognised with enhanced status, neither company had been tipped to win, nor had they ranked highly in previous reviews in terms of efficiency and service. Other more fancied contenders were found to have business plans with significant issues to address.

Companies engaged directly with about 250,000 customers in developing their plans for the 2014 price review.

As a result of our challenge, average water and wastewater bills will fall by around 5%, before adjustments for inflation, between 2015 and 2020. This would see average bills fall by around £20 from £396 to £376.

At the same time customers will see improved levels of service.

Companies are set to spend more than £44 billion or around £2000 for every household in England and Wales over the next five years. Key service improvements including:

- more than 370 million litres of water per day saved by tackling leakage and promoting water efficiency – enough water saved to serve all of the homes in Birmingham, Manchester and Leeds;

- a reduction in the time lost to supply interruptions (down on average 32%);
- 4,700 fewer properties flooded by sewer water; and
- cleaner water at more than 50 beaches.
- The number of people benefiting from financial support, such as social tariffs from their water company will more than double to around 1.8 million by 2020.

We also saw evidence of innovation through customer engagement and outcomes.

For example, one company has set up a partnership with local authority to have oil and fat – often put down the sink and causing blockages – taken away in specially provided containers. This waste is then sold and the money is given back to the community to spend on their own local projects. This is a good example of partnership working, building customer and community relationships, doing your bit for the environment and saving money on water costs.

Another example, the development of market platform to support catchment management by allowing farmers to bid to reduce nitrate application to their farms. This proved too much more cost effective than traditional capex based end of pipe solutions for improving water quality.

What did we learn?

PR14 introduced wide ranging changes in the way we set price controls. But we also found some challenges with the 2014 price review.

Firstly, the review process was late starting, delayed by long and difficult argument over the licence changes needed to enable the new controls

to expand the role for competition. This combined with the radical change to the price review framework left companies with little time to grapple with the changes before submitting their business plans.

On outcomes, we found that there were some performance commitments that tended to be common across all or most companies. Late in the price review, at the draft determination stage, we imposed six common performance commitments across all companies. And we also imposed an upper quartile efficiency challenge on these measures, requiring companies to be at upper quartile performance before they could claim rewards.

While this approach helped ensure performance commitments were appropriately stretching, it also was perceived to cut across company engagement with their customers and raised concerns among CCGs. While they understood the rationale for intervention, they considered Ofwat should have been clear about the potential for intervention much earlier in the process. The late imposition of common outcomes made it difficult to ensure that companies were working to common definitions.

Secondly, customer support for rewards. Some companies did not handle their engagement with customers well and as a result there was a concern for some that rewards were for doing what the company ought to be doing anyway and somehow the customer was paying twice. This was exacerbated by concerns held by CCWater, who initially resisted the concept of rewards for better performance.

Another learning was that the risk based review was very effective at encouraging companies to compete to submit efficient costs and

services, but it did not provide sufficient incentive to bid market view of Weighted Average Cost of Capital. No companies submitted business plans with a cost of capital aligned to our view and so we required successful companies in RBR to accept our proposed WACC before they could be awarded enhanced status.

We also learned from our review of the residential retail market. Last year – at the request of the UK Government – we looked at the costs and benefits of introducing retail competition for residential customers in England. This provided us with insight on how far and how fast the customer experience in many competitive markets is moving. For example:

- apps that offer customers the ability to manage their accounts online;
- the take up of ‘home management’ products to control heating by electronic devices;
- the proliferation of channels for customers to communicate: telephone, letters, emails, webchat, social media and voice-led assistants.

We don’t think the water sector has kept up with the retail revolution. Regardless of whether competition is introduced or not, water companies can and should do more to deliver excellent customer service, and this requires a step change in thinking and delivery.

We’re encouraging change in the way we set prices from 2019

So building on this learning as well as the successes, we look towards PR19. Our focus for PR19 is:

- Strengthening company ownership of relationship with customers and ownership of plan.
- Enabling more effective engagement and challenge by customers and CCGs by improving availability and quality of data on comparative performance.
- More stretching outcome performance commitments and more powerful outcome delivery incentives.
- Strengthening efficiency challenge on costs
- Further rebalancing of returns away from financing to operating the business. Outside of the price review process we also been focusing on corporate governance to facilitate responsive of companies to the new balance of returns.

On strengthening customer engagement.

We published our approach to customer engagement last year – including our seven principles. We are encouraging companies to consider a broader range of evidence on customer preferences. In PR14, we focused on evidence of customer willingness to pay. This encourages companies to focus on market research and surveys. While these have their place, we would like companies to consider a broader range of evidence, such as from their direct day to day contact with customers, complaints, pilots and experimental research.

We also would like to see companies improve their understanding of the distinct needs and requirements of different customers, including customers in circumstances that make them vulnerable and future customers. Customer segmentation is standard in many competitive markets yet still fairly unsophisticated among water companies. Yet they have found good evidence that customers in vulnerable circumstances

are less satisfied with their service, suggesting that segmentation could be key to improving customer satisfaction.

We also want to see companies move from seeing customer engagement as one off input into business plan into continuous process of feedback and engagement. Encouragingly we see companies moving responsibility for customer engagement from their regulatory affairs teams to their customer service.

We are also encouraging companies to look beyond customer engagement to customer participation.

We think that water companies need to think differently and more radically about how they view customers. Instead of seeing them as recipients of services, the sector should see customers as participants, who can identify issues and opportunities and help find ways to do things better, such as making improvements to the local environment, saving water or improving customer service.

To help water companies identify the possibilities for them and consider what they need do to bring customers into their thinking as active participants, we commissioned and published '[Tapped In - From passive customer to active participant](#)'. This report looking at best practice in other sectors and other countries.

One model for customer participation is the futures, action, community, experience (FACE) model:

- **FUTURES:** This is about helping to develop a shared future for water, including the future if no action is taken and how companies and customers to create the future together. This requires a deep

understanding of the value of water for food, energy, health and lifestyles as well as ways of sharing evidence and seeking informed views. There is evidence that involving customers in creating the future helps improve customer support, satisfaction and trust. It may also lead to new ideas that help the sector progress more quickly.

- **ACTION:** Customer behaviour change actions including saving water and helping to reduce sewer blockages. Their active participation at scale can deliver real impacts, and help to achieve business objectives. This requires companies to understand what behaviours are needed from their customers and have the skills to achieve behavior change. Anglian Water engaged in a Keep It Clear behavior change, which resulted in 64% reduction in sewer blockages in campaign areas.
- **COMMUNITY:** People acting together in local areas can own genuine improvements to their local water environment. This can include actions to help save water, improve rivers and bathing waters, decrease leakage and reduce the risk of pollution, sewer blockages and flooding. This requires companies to engage with communities to increase participation, give them control in a way that leads to measurable change.
- **EXPERIENCE:** Just as many other sectors offer customers content, choice and control options, water companies can give customers more control over two distinct components: the water in their homes, and their customer service experience. This requires see the service from perspective of their customers. This could involve use of technology such as automatic leak detection or the use of AI technology to help customers solve their own queries..

We hope companies to increase customer participation in their business plans for the 2019 price review.

We are also introducing a new customer service incentive, which will include an element which compares company service performance not just within the water sector but with the best in other sectors.

The initial assessment of business plans is the successor to PR14's risk-based review. The initial assessment of business plans will focus on ambition and innovation as well as quality of companies' business plans. This compares with our approach to the PR14 review, which mainly focused on the quality of the plan rather than encouraging companies to stretch for their customers. We aiming to encourage companies to really stretch for their customers.

In order to do this we propose to categorise companies into four categories:

- exceptional
- fast track
- slow track
- significant scrutiny

Exceptional plans are high quality, ambitious and innovative plans that shift the frontier in terms of outcomes, costs and customer engagement and drive wider benefits to sector. And where we consider no material intervention by Ofwat is required to protect customer interest.

Companies in this category will benefit from financial, procedural and reputational rewards.

Fast track plans are high quality plans – that don't require material interventions by Ofwat. They are efficient and stretching, but do not push the frontier forward for all customers. These plans will benefit from early draft determination and reputational benefits of recognition by the regulator, but will not receive an upfront financial reward.

Slow track plans are plans that require material interventions to protect customers such as plans with inefficient costs or insufficiently stretching performance commitments or overgenerous incentives.

Significant scrutiny are plans which fall well short of our expectations and raise serious concerns as to whether the evidence and data provided by company are a satisfactory basis for determinations. To protect customer interest, we will set tough cost sharing rates and cap upside on outcome delivery incentives.

Summary

The water sector in England and Wales has come a long way in improving services to customers since privatisation.

But the sector needed to go further to overcome challenges and the changing expectations of its customers – along with changing technology.

We have made significant progress in moving from a 'regulator focused' to a 'customer focused sector. This requires more than a change in the incentive framework – it requires deep cultural change within the sector.

A key success factor is that many companies were keen to embrace the change – albeit, after some hesitation. The focus on customers along with focus on markets and competition has increased the opportunity as

well as the risk facing companies and required to them grapple with how to best meet their customers expectations, rather than just responding to the regulator.

We now want customers engaged and actively involved in development and delivery of services. And for companies to stop focusing on keeping up with other water companies and pushing themselves compared to best in other sectors.

Thanks for your attention and patience.