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WATER REPORT
POLICY | REGULATION | COMPETITION

NOVEMBER 2016

Leakage and market reform

A more complex picture?

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THE WATER REPORT COMPETITION WATCH

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editor's comment

Time to put the house in order

We can reasonably expect to learn more about the government's intentions on opening the household market on 23rd of this month. It has had two months to digest Ofwat's thorough cost benefit analysis, and it would seem remiss of the Treasury not to use the occasion of the Autumn Statement to signal some intention, particularly as the decision will affect strategies in the non household segment which is opening in just a few months. Remember it was the Treasury (along with BIS) that kicked off the debate on domestic competition almost exactly a year ago, when it bundled the idea into a paper covering an assortment of pro-consumer measures.

But would a household market really be pro-consumer? Ofwat clearly seems to think so. When it delivered its September cost benefit analysis, all its communications dwelt heavily on the positives: the £2.9bn benefit over 30 years; the innovation, improved customer service and new offers that would flow out; possible improvements in water efficiency and reductions in bad debt; and the widespread desire among customers for the freedom to choose their supplier.

However, the Consumer Council for Water feels differently. It has pointed out what is obvious to most of us: that people simply won't switch for a maximum £8 saving, and that the market carries risk as well as potential benefit – particularly for customers least likely to engage. This intervention is significant. The government surely has to take it seriously when a customer representative which is supportive of business competition cautions against household switching, having considered the costs and benefits.

DEFRA, Ofwat and CC Water are understood to be in talks. We will of course have to wait and see which way government favour falls – if indeed it doesn't opt to kick the decision into the long grass. Brexit would be a good excuse to do that, should the government not have the stomach for a decision right now.

But one thing CC Water has called for seems perfectly sensible and something the government should demand: that Ofwat identify which of the four scenarios it scoped out in its September report it believes is most likely to materialise. After all, it would not serve customers well to talk up potential £3bn benefits if there is only an outside chance of realising them.

Karma Loveday, editor,
The Water Report

Feedback, comments and suggestions very welcome.

Contact me on karma@thewaterreport.co.uk or 07880 550945.

NEED FOR A LEAD

This month we asked our Expert Forum who should take decisions on water sector resilience and who should pay. The findings back up calls from other quarters for the UK government to call the shots, though who should pick up the bill is less clean cut.

Water UK's research on a 50 year planning framework for water resources was our cover story last month. More specifically, we focused on its call for the government to set consistent national minimum levels of resilience to drought in the public interest.

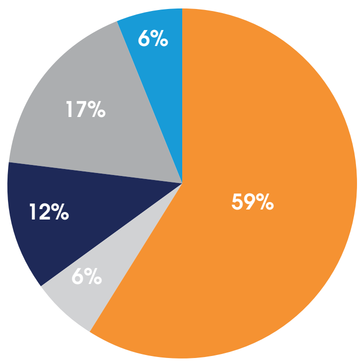
We have followed up on these issues in this edition by polling our The Water Report Expert Forum – leaders and opinion formers from in and around the industry (see box) – on their views on resilience decision making and funding, and their own organisations' resilience strategies.

Who should decide?

As chart 1 shows, nearly two-thirds (59%) of respondents identified the UK government as the stakeholder that should have the most influence on decisions on resilience. Only 6% of our respondents said customers should have the most influence on such decisions (29% said they should have the least influence of all stakeholders listed). One Forum member commented: "Customers do not always make rational decisions about what is good for society as whole as they are typically influenced by their own personal situations. Hence, I strongly believe that matters like resilience should be delivered without reference to customer views." Another said: "We should not leave the resilience of a sector as important to the country's economy and social wellbeing as water to local decisions driven solely by customer surveys."

For others, customer views are important, but should not be depended on principally. One commented: "Customers views are essential [but] it is very difficult

CHART 1: WHICH OF THE FOLLOWING STAKEHOLDERS SHOULD HAVE THE MOST INFLUENCE ON DECISIONS ON RESILIENCE?



TWR EXPERT FORUM

The Water Report, in partnership with market research company Accent, set up the Expert Forum to consult every other month on a key industry issue. Approximately half our Forum members are at board level and most of the remainder in other senior management positions. Many thanks to all those who have joined.

Group members are emailed surveys which should take no more than ten minutes to complete. Responses are treated as confidential. Findings will be reported in aggregate only and any comments used will be anonymised.

The next Forum will take place in December for the January issue of The Water Report. We would be delighted to welcome more members in senior positions. If you are interested, or if you have a topic suggestion for the Forum, please email karma@thewaterreport.co.uk

for customers to have full and accurate information on the technical issues and risks". Some saw a role for customers in refining or building on government-set standards – for instance: "Resilience levels should be set in a way that ensures the UK water service is resilient to similar levels geographically to prevent a postcode lottery on water supply…Customers must play a part in resilience setting but government must set a minimum standard…Set resilient standards will encourage sharing both of water but also of assets especially if over-resilience is tackled and over resilient companies are encouraged, via incentives, to share with other less resilient companies."

A few participants pointed out regulators should have influence over resilience decision-making. For instance, one said: "There is clearly a role for economic regulators to ensure that approaches to setting price controls and other inputs allow for the suitable investment in resilience which account for both current and future customers." Some favoured an empowered third party decision-maker: "Multi-agency approaches require ownership and accountability. Central government needs to devolve powers and clearly delegate and empower decision makers. e.g. [on] flood management. There should be a single accountable body with balance sheet."

But as noted, it was government that most felt should hold the reins. One said simply: "It would be very useful to have national standards for resilience issues. What return frequency of storms should we design our sewer networks for? What river flooding frequency should we protect against?" There was also a sense of urgency among some – for instance, from the member who said: "There is an urgent need for action now, especially in the south and east of England, given lag times for delivering infrastructure solutions, which will often be part of the mix. Policy frameworks need to be strengthened to ensure that companies and regulators can work together to deliver what is needed to secure long term resilience at lowest cost."

Some Forum members offered additional thoughts on delivery details and related matters. Some comments we received were:

- If organisations are set up correctly then they should naturally seek to resolve resilience issues…The first step therefore is to get [the] incentive right, rather than being interventionist and forcing artificial solutions."
- "Resilience is often not seen as a priority until something goes wrong. This makes planning for possible events difficult and requires senior management support. The audit and governance structures can ensure that appropriate processes are in place and resilience measures are relevant and proportionate."

HOW CAN WE ENSURE OUR DECISION-MAKING IS REGARDED AS ROBUST BY FUTURE GENERATIONS?

- "By identifying all viable resilience options and undertaking a thorough whole life cost analysis to demonstrate that whatever option is chosen it represents best value at the time the decision was made."
- "Clear assessment of the risk and the assumptions behind the assessment; clear assessment of the impacts on an economic basis and an understanding of where the impacts hit, how hard and if there are any particular target groups hit hardest; review of the options for improving resilience and a clear - and sensitivity tested - assessment of the costs and benefits at different scales."
- "In a similar way to we now approach infrastructure through the Infrastructure Commission; i.e. long term horizons, spread expenditure and consensus."
- "Large scale investment needs to be justified at an overall industry level, and not just at the company level because of the diseconomies of scale that apply in parts of the south east, in particular."
- "Natural Capital approach."
- "The balance between price and service both now and in the future is key and stakeholders should resist the urge to encourage short time price reductions and rather create rhetoric and actions that clearly balance both service and price."
- "The decisions need to be the 'best' they can be between short and long term. In particular there can be no distortions biasing decisions, e.g. historic benefits for water companies to invest in assets or short term lack of capital driving to short term solutions. There is no way of guaranteeing decisions might look wrong with perfect hindsight, but decisions should be documented and kept so that the reasons why decisions were made can be seen."
- "There are long established examples where infrastructure investment has been completed with the recovery over the much longer term, which seem to have been accepted. Strong customer engagement and a view of willingness to pay should play a key part in this balance."
- "We must continue to consider realistic scenarios in resilience planning. Multiple incidents are feasible and have higher consequences, but are much less likely. It is important that we don't 'over egg' these scenarios and focus on accounting for the core modes of failure that are most likely to present. Resilience is not about eradication of risk, but management of risk."
- "We must understand multiple scenarios of risk and build low regret options that perform well against a range of futures – such as universal metering and leakage reduction – as well as build in trigger points and abilities into decision making that allow us to flex and adapt."
- "We need to show that we have made best use of available modelling, and then test the best blend of solutions before coming up with plans. Those plans should be multi-sector (not just utility companies), regional (not just local) and long term."

- "Ecological resilience must be a consideration. The water sector absolutely depends on natural capital to supply and treat water. An objective of any resilience plan should be how to support and increase ecological resilience, not just consider the environment as a cost to be borne / minimised in securing resilience of systems and structures."
- "Revising any plan and making amendments is important."

For some, however, it was a case of first thing first. Some respondents felt we need to get the basics right before moving forward. For instance: "I am not sure we are asking the right question. I think we need to be clear: 'what is it we want to be resilient, to what set of impacts is it to be resilient and for whose benefit is resilience targeted'?"; and "No one has visibility of the current levels of resilience, it is not gathered or shared…The debate on resilience is being carried out in the absence of the above and this is hindering decision making and no party is taking the lead on driving this sharing forward."

CHART 2: WHO SHOULD BEAR THE LARGER PART OF THE COST OF INVESTMENT IN RESILIENCE?

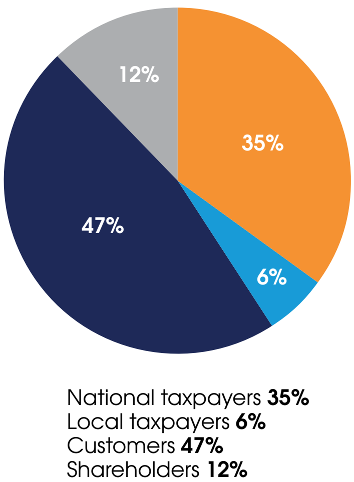
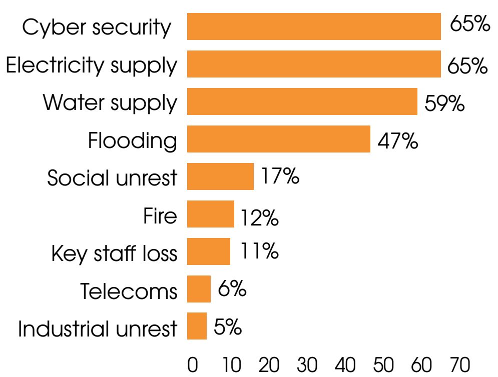


CHART 3: FROM THE LIST PROVIDED OF INTERLINKED SYSTEMS, PLEASE IDENTIFY THE THREE THAT YOU CONSIDER MOST IMPORTANT IN YOUR RESILIENCE PLAN.



Note: 0% for: Gas supply, transport, terrorism,

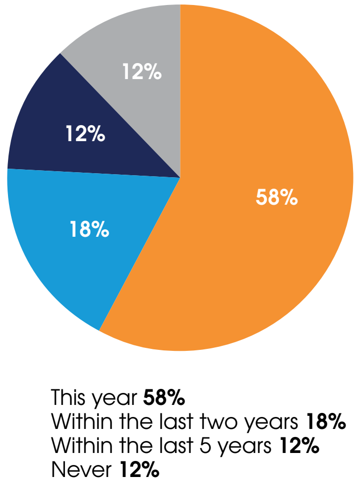
Separately, we asked: How can we ensure our decision-making process is regarded as robust by future generations (even if the outcome is not later seen as optimal)? A selection of responses is shown in the box on p5.

Who should pay?

We asked The Water Report Expert Forum who should bear the cost of investment in resilience. Chart 2 shows the proportion of respondents identifying each potential payer as the group that should bear the most cost. Opinion was more divided on this subject. Nearly half (47%) believed water customers should foot the lion's share of the bill. Among the comments supporting this view were: "The current model of economic regulation provides a framework for customers to bear the appropriate costs for an appropriate efficient expenditure to be borne by customers. This includes consideration for intergenerational impacts between current and future customers"; "This is all about delivering the service reliability expected by customers so it is only right that this is reflected in customer charges"; and "Whilst the benefit of a resilient water sector is widely felt, it is still appropriate that water customers should bear the cost and [the process be] managed via company business plans."

However over a third (35%) said the lion's share of the cost should be funded by the national taxpayer. One supporter of this stance explained: "This is an argument about how the cost burden is distributed. Water company charges are not based on an equitable distribution of wealth i.e. they are not generally determined by people's ability to pay. Taxation measures are more directed towards those who have/earn more pay more. This is the least regressive approach to funding national level capital infrastructure investments." Another indicated support for this view, but indicated a pragmatic approach might be the order of the day: "The benefits of resilience are felt by users and by wider economy and society. But taxpayer funding is unlikely. The close match between users and taxpayers in utilities means that a pragmatic solution is for government to set policy frameworks, and for companies (having engaged with customers) to come forward with best value plans to deliver resilience, which regulators can support."

CHART 4: WHEN WERE YOU OR YOUR DEPARTMENT LAST ASKED TO CONTRIBUTE TO A RESILIENCE PLAN FOR YOUR ORGANISATION?



Water organisations' plans

Finally, we asked a series of questions around the resilience strategies being pursued by our respondent organisations. On the whole, responses indicate the water sector is active and aware on this crucial issue. 58% of respondents said they or their department had been asked to contribute to their organisation's resilience plan this year; 76% within the last two years (see chart 4). Moreover, most said a wide range of groups should be part of their organisation's resilience planning – both helping to respond as well as feeding into the plan. All respondents said customers should be involved, followed by supply chain companies, shareholders, local people, relevant interest groups and others including Local Resilience Forums.

Finally we asked the Forum to identify failures in which three of a list of interlinked systems they consider most important in their organisation's resilience plan. The results are shown in chart 3. It is interesting that cyber security is now considered a top priority failure, ranking in joint top spot with electricity supply. TWR

THE WATER REPORT

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Accent

The Water Report Expert Forum

*Regular exclusive research from **The Water Report** & **Accent** into the thoughts of industry leaders on the sector's key issues. Topics to date include:*

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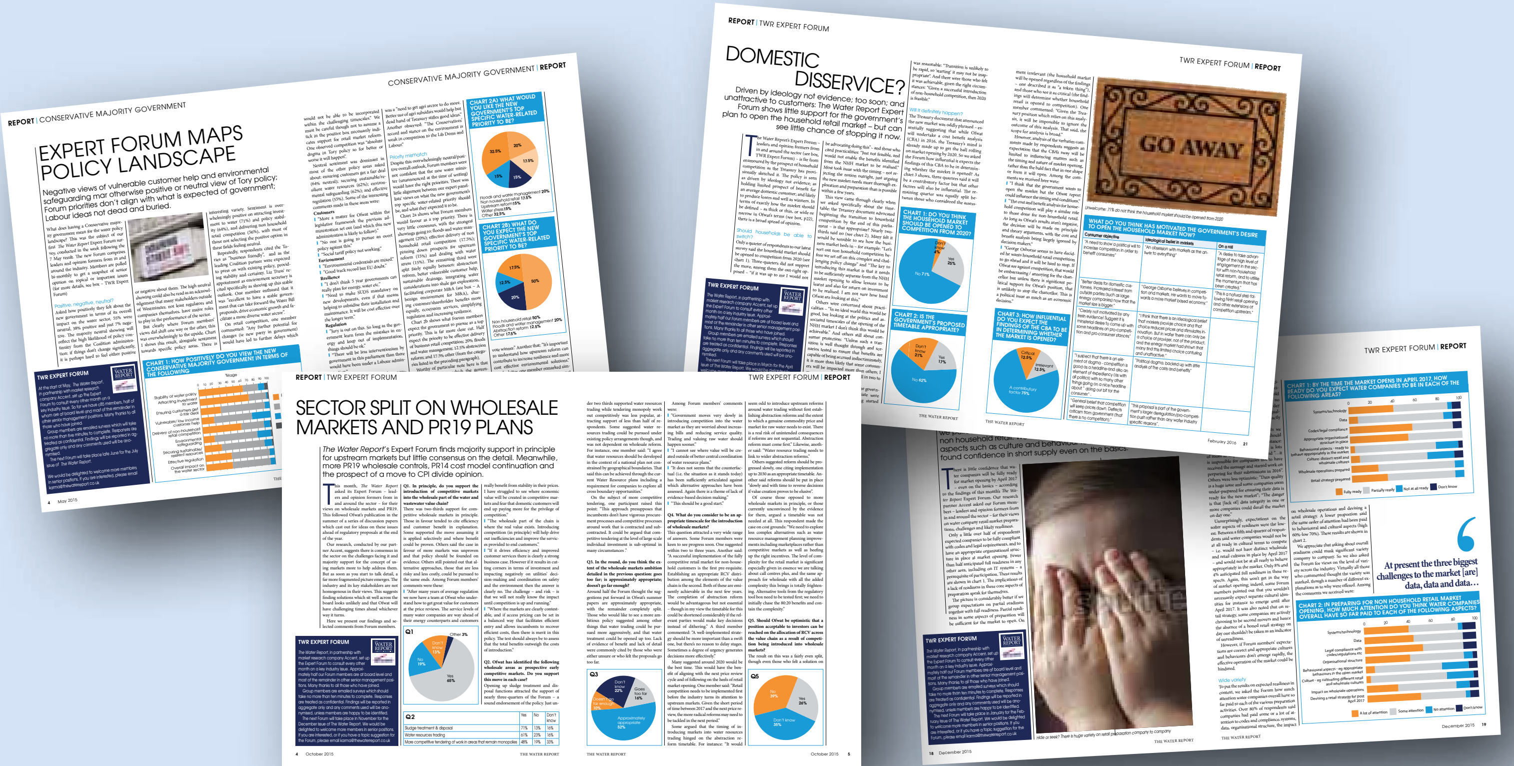
- Upstream markets and prospects for Water 2020
- Business retail readiness
- Domestic competition



Contact *karma@thewaterreport.co.uk* to suggest Forum topics or to enquire about joining.

BITE THE BULLET

Former water minister Richard Benyon reportedly said the country had "dodged a bullet" when heavy rainfall prevented supply restrictions during the 2012 Olympics. A high level Indepen round table meeting last month favoured developing a better resilience strategy over further reliance on luck.

Imagine an hour off supply. Pretty annoying, eh – not being able to wash your hands or boil the kettle or flush the loo? Now imagine an entire day without water. That's more than annoying; that would affect the fabric of life – going without a shower, having to get bottled water for the basics, leaving the laundry and probably developing a new found appreciation for the flushing toilet. Any longer than a day off supply and the situation becomes altogether more serious.

The unfortunate few don't have to imagine. In 2007, around 150,000 people in Gloucestershire went without water for up to ten days after the Mythe water treatment works was flooded. Severn Trent got through the incident by deploying bowsers and with the help of neighbouring water companies. But the experience left it determined not to leave customers in Birmingham, where the supply was fed by a single source, vulnerable to outage. A Mythe-type outcome in that city could be dangerous as well as difficult and disruptive. The company and Ofwat worked together to ensure investment for a resilience scheme for Birmingham was included at PR14.

Even where supplies are restricted in a controlled way because of shortage rather than cut off abruptly due to an emergency, the knock-on effects of being without water can go surprisingly deep. Aside from the general inconvenience, anecdotes from places like Los Angeles, where all outdoor watering was banned as a result of drought, tell of the depressing effects on the whole community and the quality of life impact of brown lawns, dead gardens, dry fountains and dirty cars.

London without water

Now let's imagine applying what we know from such experiences to the south and east of England and, specifically, to London. Water shortages there would likely mean heavyweight restrictions being imposed, given hosepipe bans wouldn't make much impact in a densely-packed city where many don't have gardens let alone hoses. You could be looking at shutting down the Tube because of insufficient fire system supplies; hotels closing because their catering and laundry facilities couldn't function; financial and business centres being unable to remain open on health and safety grounds; in short, London grinding to a halt. Aside from the social and possible health consequences, the economic cost of the city closing for business has been put at over £300m a day. And, given London's role within the wider UK economy, these impacts are national, not just local or regional. Experts estimate that should supply restrictions on this scale ever be needed, it would likely be at least five weeks before they could be lifted, even with a fair wind.

And yet we live with this risk every day – and the risk of similar supply restrictions elsewhere in the south and east. Why? And what can we do about it? Those were among the questions explored on 13 October when Indepen brought together a roundtable meeting of experts including water company leaders, government, investors, supply chain representatives and customers to discuss the water resource position of the south east and beyond.

To dispel any doubt that the threat of supply restrictions is real, the meeting kicked off with an anecdote from the "hidden drought" of 2012. Two dry winters on the trot meant in the first quarter of that year, just ahead of being in the world's spotlight as host of the Olympics, London was staring down the barrel of supply restrictions. The city takes around 2,000ml/d and there is a requirement to keep 800ml/d flowing over Teddington Weir [where the tidal meets the non-tidal Thames and freshwater meets salt water]. In 2012 this fell to below 700ml/d. The capital was only saved from a catastrophic fate by a very wet second quarter. This outcome only had a 3% probability – a fact which caused then water minister Richard Benyon to reportedly remark the country had "dodged a bullet".

But unlike Severn Trent with Mythe, UK plc doesn't seemed to have learned its lesson from this and other better known droughts, such as that of 1976, when there were famously standpipes in the streets. Once the immediate emergency has lifted, the tendency is to carry on as before, hoping for the best. But the bald fact is the risk of water shortfall is ever present. One attendee at the Indepen meeting remarked: "If London was being run as a business, it would not be acceptable to carry this level of risk."

Of course the water companies haven't been sitting on their hands. They have Wa-

ter Resource Management Plans (WRMPs) which feature, among other things, strategies to manage demand, model risk to future supply scenarios and operate more efficiently. Indeed some at the meeting referenced the impressive achievements such approaches have had: one reported that total demand has fallen despite a recent 6% population rise. However, others emphasised passionately that pursuit of efficiency without accompanying investment in new resources (the last investment in the region's water resources was made over 40 years ago) was actually increasing the risk of failure by eroding headroom. Moreover, new research published by Water UK on the country's 50 year resource position (see box p10) is incredibly sobering, despite factoring in existing achievements and ambitious demand side assumptions. One commentator concluded: "The UK is going to run out of water, especially in the south east. All you need to know is the south east is always red [indicating water shortage, on maps showing possible scenarios for 2065]."

So why have we allowed ourselves to slip into this position? Why, given the wider social and economic risks that would accompany supply restrictions, isn't finding a solution top of the public and political agendas? And how can the issues be brought to the surface for thorough debate and decision-making?

It's not about the money

Let's first discount a few possible explanations of why we are carrying such a high level of risk. It cannot be attributed to the fact that the cost of building resilience to drought in the south and east would be prohibitively expensive. The Water UK research puts a very cheap average cost of £4 per customer per year (£5 under drier climates) for the extra spend needed to increase resilience to severe drought, assuming the right measures are taken early enough. There was repeated use of the term "no brainer" at the Indepen meeting to describe the decision to boost resilience to drought given the negligible cost. Indeed, a number of people including customer and investor representatives commented that customers would be appalled should that money not be spent on securing the top consumer priority of safe, reliable supply – particularly as the country has been able to steer a course to investing in a £4bn wastewater tunnel under the Thames.

Those with residual concerns about adding to hard pressed customers' bills in any way, shape or form could take comfort from a point made by Ofwat chief executive Cathryn Ross at a water conference hosted by Moody's the day before the Indepen meeting: that companies should look to offset resilience increments on bills by pursuing hard efficiencies elsewhere – for instance, on bad debt costs (see report, p23).

Coming at this from another cost angle, one attendee reported a new £1.5bn reservoir would pay for itself in five days, should Level 4 restrictions costing the economy £300m a day be imposed in London. And even if smearing the cost across the domestic customer base of the south east is unpalatable, business customer willingness to pay could be explored under the beneficiary pays principle, provided the wholesale charging principles were applied correctly.

If anything, the cost benefit case cries out for taking proactive action to build resilience to drought, rather than waiting for shortages to hit and then being backed into a corner. One delegate at the round table offered insight from Australia, where authorities in the east and west of the country took very different approaches to the millennium drought, with very different outcomes. Eastern Australia stood accused of "playing Russian roulette with people's health" after failing to engage the public and proactively respond to the looming drought situation. It ended up dashing to build an expensive advanced treatment plant at Wivenhoe Dam in Queensland – an asset that has subsequently come under fire for being stranded once the drought had lifted.

In stark contrast, the water corporation of Western Australia made what the delegate described as a "timely and visionary call" to advocate a mission that was summarised as "water forever, whatever the weather". This involved extensive public engagement (based around the concept of a drying climate rather than a drought, as the latter implies the situation will pass) as well as investment in desalination and groundwater recharge alongside well managed supply restrictions. This enabled the area to provide confidence on supply continuity and even to accommodate growth. The expert emphasised the importance of the public education and engagement piece; the need to win both "head and heart" to maintain support for operational actions and to encourage everyone to do their bit.

Bringing this lesson home, another delegate commented that should 2012 have turned into a 'visible' drought, measures would have been taken in haste and we'd probably be regretting them now.

It's not too difficult

Nor is building more resilience to drought an intimidating technical challenge. Of course it is a million miles from a walk in the park: there are many future unknowns, as well as known difficulties including engaging the public, quality issues and securing planning permissions. But the industry has a clear vision of the need for twin track demand side and supply side action. The 50-year resources research set out in practical terms what needs to be built where, as well as ambitious strategies for leakage, water efficiency and demand management.

For sure, refinements and further work are needed, both to hone the proposals already made and to flesh out new opportunities and unanswered questions. New opportunities might include, for example, innovative ways to reduce per capita consumption at new developments by baking in reuse and efficiency, as Albion Water is exploring at its Rissington site. An optimistic model that assumes all new developments are built to achieve the water efficiency of sites like Rissington would see a 60% reduction in the size of the future supply gap (500Ml/day by 2065) predicted by Water UK's work on long-term supply resilience.

An area ripe with unanswered questions is system operation – specifically, as we scale up from the local resource management performed by water companies to managing water from a national position, who is best placed to act as system operator and how? But the fact remains that the bones of a plan are now scoped out and ready to be built on.

And for those who are suspicious of water company motives in advocating building assets as a means to enhance their Regulatory Capital Value and hence returns, Ofwat's PR19 policy offers relief. The regulator has opened the door to third parties delivering £100m+ projects; to counter claims of RCV avarice, all major works could be competitively tendered. In fact, delivery by a separate, licensed entity would offer other opportunities too. For instance, to counter prospective bidder/investor fears of asset stranding, something along the lines of payment for availability rather than usage could be worked out. To avoid any politically unpalatable burdens on the taxpayer, mechanisms could be found for water customers to foot the bill as is happening with Tideway.

Is the framework fit?

So with cost and practical issues scoped out (to some extent at least), the Indepen panelists moved on to look at the policy and regulatory framework. Some argued the system is sufficiently flexible and long term in its approach and hence that it does not get in the way of building resilience to drought. WRMP guidance has been recently updated which addresses some of the previous shortcomings. And the price control system, with its express objective of delivering customer priorities and the new resilience duty for Ofwat, should be a suitable mechanism for delivering safe secure supplies – if customers are indeed supportive of the marginal cost increases this would necessitate.

However two major criticisms of the existing policy framework surfaced. First, the fundamental matter that there is no long term minimum standard for resilience – the focus on the industry has been on increasing efficiency which can mean reducing unused capacity. Unfortunately that headroom is the insurance policy against supply failure. And second, the cornerstone of the existing planning framework – WRMPs – can still be backward looking. They have tended to take account of guidance which assumes scrutiny of historic supply/demand and climate data, but have not required forward projection (although the new guidance does begin to address this issue). One delegate remarked you can guarantee little by relying on past data but "you can guarantee historic models will be wrong". Referring to the Mythe case, another participant observed that a key issue had been that "we'd been looking in the rear-view mirror too long".

The obvious counter to these deficiencies would be a forward looking national plan for water. The meeting discussed the merits of a top-down route, under which resilience levels are a policy choice for government, versus the existing bottom up arrangements, under which companies base their resilience activities on their customers' sentiments and willingness to pay. The former would undoubtedly ease the wheels of resilience delivery; one attendee pointed out a new reservoir for the south east has been under discussion for the past 20 years and that some of the relevant land had even been bought but progress remained thwarted. He added that the need to get on was urgent, given it would take a minimum of 15 years to deliver any major new resource (five

KEY POINTS FROM WATER UK'S REPORT ON A LONG TERM PLANNING FRAMEWORK FOR WATER RESOURCES

- There is already a significant and increasing risk of severe drought across many regions, particularly in the east and south of England. Those companies whose WRMP anticipates no deficit or surplus against planning standards, and being resilient to the worst historic drought on record, still run a 12% chance of seeing a drought event with standpipes or similar in place for two to three months over a 25-year planning period.
- Future scenario modelling suggests there is the potential for huge and widespread deficits.
- Our current plans for drought response have not been tested in anger.
- There is an indisputable cost benefit case for ramping up resilience. There is an average cost of £4 per customer per year (£5 under drier climates) to cover the extra spend needed to increase resilience to severe drought if the right measures are taken early enough. There is a "strong economic argument" for providing resilience to extreme drought; that is costed at £8/customer/year (£10 under drier climates).
- Customers put a value of £40-£160 on avoiding a single day of restrictions. Costs to the economy come on top. Economic losses to businesses and other water users across England and Wales are costed at £1.3 billion per day.
- The central estimate of the benefit/cost ratio is greater than 10:1; it remains greater than 5:1 even if lower bound benefit estimates are assumed.
- Water companies' level of resilience to drought is a matter of public policy and the UK and Welsh Governments should set consistent national minimum levels of resilience in the public interest and develop a wider supportive policy framework.
- The country needs to pursue a twin track strategy of ambitious demand management and supply enhancement – in particular through large-scale transfers of water between companies and regions, supported by storage and new local resources.
- Further work is required to develop the position.

years for build and ten years for planning and other permissions). "Can we really continue with the ifs, buts and maybes? Fifteen years out, we need to be doing something."

A water investor added government-specified levels of resilience and risk would help bring the money in: at present, investors won't fund the likes of desalination plants that will only be used at times of peak demand because they won't be remunerated for them. "Risk has to be driven at the national level," she said, adding: "We can't pay for risk." A clear and consistent national policy framework would mean new resources could be invested in from a position of providing valuable insurance rather than of dicing with asset stranding risk.

The wider issue of who should fund resilience investments is a live one – the taxpayer, the water customer, investors, businesses that benefit, a combination of the above or even some more innovative arrangement? One participant highlighted the Flood Re scheme as an example of the sort of deal that might be possible; under Flood Re, all household insurance policy holders pay around £10 a year to cross-subsidise flood insurance for those living in vulnerable areas. Tideway experience suggests the government would be keen to keep the taxpayer out of the picture so innovative thinking could be order of the day.

Prioritising water policy

Referencing Singapore's National Water Agency PUB, another participant illustrated the progress that could be made with committed political backing. Singapore's issue is not shortage of water, but shortage of storage space and consequently a reliance on supplies from Malaysia (which it is keenly aware would be subjugated to domestic demand in a drought situation). The government took the decision to acknowledge water as a fundamental driver of the wider economy; to empower PUB to engage extensively with the public and to innovate; and to make it so "all other policy bowed to water policy". It has identified four national "taps": "active, beautiful clean" catchments; its only river, which is kept healthy as a priority; "new water" including desalination – this tap now contributes around 55% of supply; and imports from Malaysia which it is working to close off by 2035. A fifth tap is under development: stormwater, to be collected and stored underground in caverns – an innovative initiative.

Clearly resilience is on the UK government's agenda and so the hope is the sector is pushing at an open door. But the Indepen meeting heard that decisive and specific action is needed urgently. The Water UK report took the view that water companies' level of resilience to drought is a matter of public policy and the UK and Welsh Governments should set consistent national minimum levels of resilience in the public interest.

Others pointed out that while the new WRMP guidance had given companies more flexibility, deviating from the expected path of basing decisions on historical data remained hard going. Southern Water managed to build future scenario planning into its models, but only three years and 83 meetings later.

Another delegate questioned whether, in this "era of incentives and performance commitments" the government needed to "go the extra mile" and offer financial incentives as well as a facilitating framework. He noted that with reputational risk alone, progress has been slow.

Speak up and step up

While an appropriate policy framework was top of many of the Indepen panelists' wish lists, they did not shy away from accepting the sector itself could do more too. At the head of this particular list was better communication. A business customer representative explained that even among very large users where water is critical to operations in some cases, the risk of supply restrictions is only vaguely on the radar. So the sector needs to rally business customer understanding of the real resource position, and do likewise with all other stakeholders that will be affected. This includes agriculture, energy and powerful membership associations such as the Wildlife Trusts, WWF and the RSPB. Not only would greater stakeholder understanding assist with demand side initiatives, but it would ensure there was a broad coalition of interests with the same end goal: a safe secure water supply, be it for their children to drink, their crops to grow, their business to function or their environment to thrive.

One participant concluded that in the battle against drought: "Communications will help you or will kill you. That includes lack of communication, wrong communication, even the wrong words."

There was also extensive discussion of the role of leadership in working towards a system that is more resilient to drought: is anyone leading; who should lead; and what are the blockers to someone stepping up? One delegate explained with conviction that individual water companies had shown leadership on the issue – including for instance by taking on the challenge of reaching a 50-year view on the national water resource position, and by pushing the boundaries of WRMP guidance.

New approaches to collaboration are occurring, for instance in East Anglia, with Water Resources East (WRE). The WRE strategy and action plan, although led by Anglian Water, will be discussed, researched and agreed through a broad collaboration, including other regional water companies, large abstractors (such as agriculture and power companies), environmental organisations, business leaders, local authorities, Local Enterprise Partnerships (LEPs), water company customers and their representatives, regulators, community representatives and others.

Might anyone else take a leading stance for the South East? The finger briefly pointed at investors at the meeting: with the power of the purse strings, could committed investors lead the case for better protection against supply restrictions? According to one refreshingly plain-speaking investor, this was an unlikely role for her kind to adopt, despite their genuine interest. "If you are looking to investors to lead this debate, you'll be waiting a long time as their needs are too divergent," she said, adding: "Investors would rather be led than lead."

Some felt an independent, non-partisan champion would be useful. But others indicated that companies, customers, independents and investors alone could only go so far. One participant felt that as well as the more supportive policy and regulatory framework that is emerging, a clearer political voice is needed to champion the benefits to the country as a whole.

So the sector has thrown down a challenge: resilience is a national issue that needs national leadership, it won't be solved through bottom up plans from companies. The $64,000 question is: who will listen, and will action be bold enough, and soon enough? TWR

| See The Water Report Expert Forum research on resilience responsibility and funding, p 4-6.

LOW REGRETS INVESTMENTS AND BOLD POLICY CHOICES

The National Needs Assessment calls for a twin track approach to better infrastructure.

An independent stock-take of the UK's infrastructure, published last month, has called for a twin track approach to making our assets fit for today and tomorrow: scaleable, flexible "low regrets" investments on the one hand, teamed with bold policy choices where necessary on major projects. "Certain critical decisions need to be made about major investment and policy commitments. Many of these decisions are now overdue," the National Needs Assessment report said.

On water it calls for more vigorous action to manage water demand, further reductions in leakage, the development of new resources where demand side action alone is insufficient– potentially including water transfers, storage, groundwater recharge, desalination and effluent re-use. Moreover, it calls for investment in wastewater asset renewal, and a holistic approach to flood management. Among the specific recommendations made are:

- Government or NIC should review the need for changes in policies relating to the extension of metering, smart metering, new tariff structures and requirements for water efficiency and innovative technologies (e.g. rainwater and greywater recycling) in new building and refurbishment.
- The government should review the case for establishing minimum standards of resilience for water supplies.
- NIC should work with the water sector to reduce the risks associated with the planning and promotion of new strategic water infrastructure schemes including water transfers and new storage.
- The government should continue to analyse flood risk at the scale of catchments and coastal cells. Resources should be allocated so as to minimise the economic risk of flooding. Further action should be taken to promote the uptake of property-level protection where community flood defences are not cost-beneficial.
- Government should establish large scale experiments to quantify the benefits of catchment-based flood management.

The Assessment, an expert review of how our infrastructure across all sectors is performing and what needs to be done, is a significant document because it "provides the National Infrastructure Commission (NIC) with a blueprint for its own National Infrastructure Assessment (NIA). It guides the NIC towards the immediate infrastructure interventions that are required now, the decisions needed to deliver services for the next generation and scenarios for our infrastructure needs until 2050."

Last month, chancellor Philip Hammond announced the NIC is to become an independent executive agency with its own budget. It will come into force in January 2017, with Sir John Armitt acting as interim deputy chair. An open competition will now be held to find the commission's first permanent chair and new additional commissioners to boost the team and take forward its work. A call for ideas has also been launched to inform the commission's next in-depth study, following reports which identified the benefits of Crossrail 2, transforming Northern connectivity and smart power.

The announcement followed uncertainty over the future of the NIC after the Neighbourhood Planning Bill omitted to put the body on a statutory footing. TWR

MPS: WE NEED A "ROOT AND BRANCH REVIEW" ON FLOODS

The Environment, Food and Rural Affairs Select Committee has warned that government proposals for flood resilience "will not rectify fundamental structural problems." The committee has proposed a "root and branch review" of the management of England's flood risk to include incentives for farmers to store flood water on their land, an extension of water firms' role as water drainage companies and a new governance regime that displaces the Environment Agency.

The committee proposed a new governance model for flood management including a new National Floods Commissioner for England, to be accountable for delivery of strategic, long-term flood risk reduction to be delivered by new Regional Flood and Coastal Boards that would take on current Lead Local Flood Authority and Regional Flood and Coastal Committee roles. Also, a new English Rivers and Coastal Authority, would take on current Environment Agency roles "to focus on efficient delivery of national flood risk management plans."

In broadening water firms' parts as Water and Drainage Companies the committee has proposed they should take on the land drainage responsibilities currently held by local authorities.

It urged flood risk management bodies to better their understanding of the contribution that sustainable drainage systems (SUDs) can make to protecting communities from flooding. And it called on DEFRA to ensure that SUDs are deployed to maximum effect in all new English developments.

The committee also proposed exploiting opportunity arising from Brexit to place flood management "at the centre of any new support schemes for farmers that replace the Common Agricultural Policy." The MPs pressed DEFRA to consult by July 2017 on an incentive scheme to pay farmers to make land available for storage of flood water in the long and short terms.

SUDS REVIEW UPDATE

Planning minister Gavin Barwell has provided an update on the government's progress with a review of planning legislation and policy as they relate to sustainable drainage.

He said DCLG officials, together with those from DEFRA and the Environment Agency, are gathering evidence now with a view to substantially completing the process by spring 2017.

The government committed to this review in May, in response to a cross-party House of Lords amendment to the Housing and Planning Bill which sought to remove the automatic right to connect to a public sewer for surface water, as part of a bid to encourage the adoption of SUDS and ease flood risk.

LOW INTEREST RATE RISK

Moody's warns of potentially severe implications for outlier companies.

In a worst case scenario, persistent low interest rates teamed with tough regulatory choices could leave companies with high levels of expensive embedded debt in financial difficulty.

That was a stark message from Moody's when it published a paper last month flagging up the credit negative implications of low interest rates for regulated water and energy companies. The ratings agency pointed out that the market cost of debt in the UK has fallen sharply since 2014, (gilts have fallen by an average 2% across the curve) and is now at a level lower than many infrastructure companies' cost of debt, which in a number of cases has been locked in 30 or 40 years.

While companies wishing to raise new debt will of course benefit from low rates, continuing low yields bring the following risks:

- Significant returns cuts at PR19: Ofwat does factor in embedded debt costs when setting returns but references a notional company, which at PR14 had gearing of 62.5% and around 33% of index-linked debt within its capital structure. Therefore "companies with higher levels of gearing, higher funding costs and longer tenors than assumed by the regulator are particularly exposed," Moody's explained. To illustrate possibilities, it modelled two wholesale returns post 2020 – 2.14% (implied by the gilt curve) and a 50bp higher return at 2.64%. The former lead to ratios falling below the guidance for current ratings for many. The latter resulted in a milder deterioration of credit metrics.
- Fair value differences: As a result of the market cost of debt being below the average company cost of debt, the market value of debt in the sector is higher than reported on companies' balance sheets. Moody's notes that in addition to these 'fair value differences' relating to fixed-rate bonds, companies may also have significant mark-to-market exposure on their swap portfolio. "Overall fair value leverage (debt at fair value plus mark-to-market of derivatives) has increased and for a number of regulated companies is now above 100%."
- Equity erosion: To make matters worse for some, capital structure choices may have eroded equity. Moody's observed: "Fair value leverage takes on greater significance when the amount of remaining equity may be close to zero. An erosion of the equity value could reduce the willingness of shareholders to provide further funding. In addition… lenders may in future be less supportive of companies with high embedded debt costs and potentially limited equity value."

Outliers

Stefanie Voelz, vice president of the infrastructure finance group at Moody's, said that should low interest rates persist long term "the whole sector will suffer". But for now Moody's has highlighted outliers, particularly Yorkshire Water and Southern Water, both of which have a debt maturity profile extending well beyond that of a notional company. Based on company published data as at March 2016, Yorkshire's fair value leverage stood at 132% and Southern's at 122%. Moody's added these numbers may now stand at more than 150%.

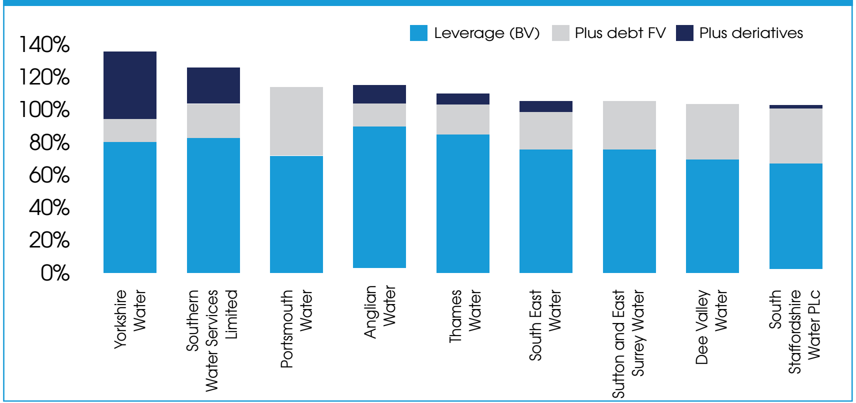
For outliers, the risks are greatest, Voelz explained: "Ofwat said in the past, financial decisions are for companies' management and shareholders to take, and they should also bear the risks and consequences linked to these decisions. Bearing that in mind, Ofwat may not be willing to bail out individual companies that suffer from funding choices, which are not well aligned with the sector as a whole or, indeed, regulatory assumptions for an efficiently financed company. However, if the whole sector faced difficulties, it may be a different issue."

Voelz is first to admit there are a lot of ifs and buts here: how long interest rates stay low and how deep they go; how the numbers are modelled; and, of course, what choices Ofwat makes at PR19. She says the regulator has more flexibility than the Moody's numbers imply. Important will be how it defines a notional company; how it splits embedded and new debt; and the horizon over which it looks in setting the cost of embedded debt. At PR14 Ofwat was guided by historical average rates over a ten-year horizon. Moody's said continuing with this will, "absent a sharp increase in yields, invariably result in a decline in the future allowance for the cost of debt, as well as the cost of equity." However Ofwat may use a longer period than ten years in setting the cost of embedded debt in 2020, which would lessen the likely reduction in allowed returns."

Also in the mix here of course are the new approach to cost of debt at PR19 Ofwat has recently consulted on (to index the cost of new debt) and its plan to switch to CPI indexation. Voelz said the details on these issues, particularly Ofwat's approach to embedded debt, are "not entirely clear" at this point.

Of course companies as well as Ofwat have flexibility. For instance, Voelz said "Yorkshire Water is actively looking for strategies". The two key levers available are deleveraging and dividend control. Voelz said both levers are already being pulled by outlier companies. TWR

COMPANIES WITH FAIR VALUE LEVERAGE ABOVE 100%



BUSINESS PLANNING TO BUSINESS AS USUAL

Together, Southern Water and its Customer Advisory Panel have set about turning the company's poor performance on customer service around.

Southern Water's Customer Advisory Panel (CAP) has published its first annual report, detailing how it has monitored, advised and challenged the company in 2015-16. It has been able to do this because Southern opted to continue directly with a PR14-style Customer Challenge Group once its price review group had run its course; there was only the briefest of pauses to refresh the membership, re-engage independent chair Anna Bradley, agree new terms of reference, and rebrand the group to signal things had moved beyond the regulator-mandated stage.

Southern Water chief executive Matthew Wright says the PR14 experience had left the company "addicted to engagement". He explains: "I am firmly of the view that our PR14 business plan was a much better product as a result of the CCG process – it added huge value…For us, customer engagement is not just about a price review, it's about running a business. So it was entirely natural for us to continue this in the business as usual phase."

He adds that even just one year in to the CAP's operation, it is delivering "arguably more" value than the CCG did because the advice and challenge has become "embedded in the way we do business".

Bradley explains the CAP has been formed in the image of the CCG and is focusing on the same two issues, though it is now taking a different angle on each: how Southern is engaging with its customers (on an ongoing basis rather than expressly to develop a strategic forward plan); and whether Southern is delivering on its promises (rather than working out what it should deliver). While the monitoring function is common to all successor CCGs – most companies have a group up and running now, though many were slower out of the blocks – the customer engagement function is particularly pertinent in Southern's case.

Customers first

In the recently published 2015-16 SIM scores and written complaints data, Southern was the worst performing company in the industry (and by a fair way in terms of complaints). Responsive customer service is one of six main priorities Southern committed to deliver in its business plan, underpinned by a number of promises, including to be among the best in the SIM table by 2020. The CAP reported the company had been "refreshingly candid" about the challenges it faces in this area; and that in year one, that the company had missed its "direct compensation where we let you down" and "quick and effective resolution of your queries" targets.

Wright sets out the context: "We have concluded that the genesis of our relative underperformance is our metering programme." He explains that the company did its utmost to focus on managing the rollout well and ensuring the customer journey was smooth, including through offering "safety nets" in the form of a changeover tariff and an early form of social tariff. That paid dividends – the company did a good job on installations; there were few complaints directly about the meters; and consumption has fallen 16% on average. Wright calls this "a great success" and it certainly vindicates the choice of implementing a universal metering programme. But he admits that the company paid less attention to "what happens then".

He observes that customers are used to, and typically like, stable bills, but that "measured bills are by definition more volatile, seasonally at least". So whether you are a net winner or loser from metering, you are likely to experience some unwelcome volatility. He further admits that in some instances the situation was exacerbated by the company's billing systems being slow to catch up – for instance, a delay in passing on higher charges to a customer could result in a build up of debt; equally, overcorrecting a customer's regular payments to account for higher charges could lead to an unnecessary build up of credit. "It has

been difficult to find the sweet spot in what customers need to pay," Wright considers.

Yet Bradley is confident better times are on the horizon for Southern customers. She says being free of business planning duties has enabled both company and CAP to focus closely on customer service and customer engagement, and in fact to set in train a "sea change" in the company's culture and processes. The CAP report comments on the "very full engagement of the CEO, senior managers and the attention of the board" in this pursuit. Bradley adds though: "It's not just about the most senior people changing, it's about everyone all through the organisation – like a stick of rock. That is not an insignificant challenge for Southern."

The company has developed a "turn-around strategy of significant proportions," according to the CAP. The first plank of this is a more proactive approach to handling volatile bills. Wright observes that with measured charging "you can never get back to complete predictability – it's pointless trying". So instead the company has started to analyse customer consumption data and to proactively contact those whose usage shows appreciable increases: to offer information on ways to spread the cost; to flag up payment assistance schemes for those who might qualify; as well as to provide advice on ways to reduce consumption and, since last year, home water efficiency visits. This has involved setting up an outbound contact centre and a "sea change from a reactive approach to a proactive approach". Wright adds: "It's about taking away surprises rather than just letting it happen".

Changes to inbound contact handling are also in progress. Later this month Southern is due to roll out a new e-services platform so customers who desire it can transact through digital channels. There is also a new customer insight strategy which depends on the collection and collation of all the data Southern Water has about customers and from customers into one body of knowledge. According to the CAP report: "This has both significant system and process implications. The plan is still at an early stage and the CAP has been pleased to advise on its development, but is keen to see this progress more quickly now that the plan is in place."

Bradley is upbeat on prospects. "There's no turning the clock back now," she says, adding that the new approach "seems to be bearing fruit". She is keen to see the groundwork of 2015-16 built on and the official results taking an upturn.

Wright reports some impressive early results: that complaints started to fall "precipitously" from November 2015 and have halved in the year to date, with the scale of improvement accelerating. "We had a big landmark recently: a week with fewer than 100 complaints," he says. Wright points out though that while that is really something for the company to celebrate, "we're under no illusion that we've still got a long way to go". He says that on year to date performance, Southern would be around 14th in the SIM league – "so we're still not exactly knocking the ball out of the park". Bradley says the CAP will be pushing the company to "address the need for a step change on the customer service side and to constantly embed learning".

Being free of business planning duties has enabled both company and CAP to set in train a "sea change" in the company's culture and processes.

Other priorities and promises

With a handful of exceptions, the CAP report shows Southern has put in a solid performance in year one. Here is a summary of its five remaining business plan priorities and its delivery against them.

- A constant supply of high quality water: The company delivered four of its six promises with industry-leading levels of performance. It fell short on its low water pressure target, though says this will soon be corrected with a project coming on stream in the Isle of Wight; and on its promise around customer minutes with lost supply, which it attributes to a single major burst.

Bradley says the CAP has scrutinised whether the latter was a genuinely exceptional incident that couldn't have been foreseen.

- Removing wastewater effectively: Performance was on track for three of the four promises in this area, the exception being internal sewer flooding. Given the importance customers attach to this, the CAP has pressed for more information on why blockages occur and how they can be predicted and prevented.
- Looking after the environment: Southern has performed well. Wright highlights the area as one he is particularly proud of: the company continues to build on five years of improving performance on pollution incidents and in the year to date has zero failed works. He says his company now puts in high end performance in the round compared to its peers – a "massive, massive improvement, we've come on in leaps and bounds". On the negative side, the CAP notes the final number of bathing waters in the region achieving excellent status for 2015 was lower than target and that this resulted in a financial penalty. It accepts though that the company is not entirely the master of its own destiny here, given success or failure hinges on the behaviours and performance of external stakeholders. It welcomes Southern's adoption of "a new, more strategic and integrated approach to stakeholder engagement" which includes the plan to form strategic environmental and county Stakeholder Panels. In addition, Southern agreed a specific mechanism with Ofwat that involves the CAP participating in the process of selecting which seven beaches to improve this AMP. The panel has focused on advising and challenging company plans for customer and stakeholder engagement. Decisions will be made late this year.
- Better information and advice: The CAP is working closely with the company to develop an evidence based strategy and to improve its communications, particularly on the matter of customers flushing wet wipes into the system.

Complaints started to fall "precipitously" from November 2015 and have halved in the year to date.

- Affordable bills: The CAP has supported Southern's efforts to extend access to its social tariff, both through redefining its understanding of water poverty and by undertaking further research on willingness to pay for additional support. It is also supportive of the company's efforts to align its tariff more closely with those of the water only companies nearby and has requested a specific report how the company is responding to Ofwat's challenge on vulnerability.

Year two and PR19

It has been agreed that the CAP will morph into Southern's CCG for PR19. So while all the monitoring work has been going on, Bradley and her team have also been preparing to advise and challenge the company on its plans for 2025 in addition to its current delivery of plans for 2020. Its terms of reference were updated accordingly in June.

There is a purer customer focus in terms of composition of the panel than at PR14 when quality regulators were included. This time the quality regulators will attend as observers rather than as members, as frequently as they wish. The group will share papers and agendas so the Drinking Water Inspectorate and the Environment Agency can decide when to come. Bradley adds that papers will be on the website going forward, for anyone to see.

Ofwat has specified Consumer Council for Water representation on PR19 CCGs; Bradley welcomes the expert input but says details need to be worked out as the panel will work best if it can form a single collective view on issues rather than each member representing the position of the organisation to which he or she belongs.

Bradley says CCGs at PR14 had a significant impact despite lacking deep knowledge of the industry because there was a lot of "low hanging fruit" to gather, in simply getting companies' heads around involving customers in their business plans. For PR19, the consumer champion says the groups "will be asked by Ofwat and expected by companies to help them raise the bar" despite this low hanging fruit having been picked. In this they will have two new assets. "The CAP has a level of understanding we didn't have at the CCG, particularly on steady state delivery. That will help us be more questioning and challenging when it comes to the next business plan."

And secondly PR19 CCGs will have more access to data benchmarking companies against each other. Bradley describes Ofwat as "slightly coy" in its engagement with CCGs at PR14, conscious not to infringe their independence or fetter them. But this time around, engagement is starting earlier (CCG chairs have quarterly meetings with Ofwat and each other – another new development for PR19) and more information is to be provided up front. She welcomes this: "I said in my feedback that Ofwat should not be so shy of having a relationship with CCGs. We are a quasi-regulatory mechanism." She believes more comparative information will help customer groups challenge their companies to stretch.

Wright will not be in the CEO chair at PR19 having given notice of his resignation to the Southern board. But from his perspective, Ofwat should continue to afford companies considerable freedom in establishing, structuring and dealing with their CCGs. He says those who sought prescription at PR14 "completely missed the point".

As year two progresses for the CAP, it will obviously continue to monitor Southern's delivery of its priorities and promises for 2015–2020.

In the very immediate term, both company and panel will want to engage with Ofwat's consultation on PR19 outcomes, due at the end of the month. Bradley says the CAP needs to be able to build any specified common outcomes into its thinking at the outset rather than have them sprung on it at the end as at PR14. She believes "there must be scope for specific outcomes to reflect local needs" against this backdrop of some commonality.

The live issue for Wright is how rewards and penalties will deal with situations where companies are not pulling all the strings. He refers to Southern missing its target in 2015/16 to maintain the number of beaches at excellent standards. He says on a four year average, his company's performance is the best in the country, but it faces penalties for this year's dip despite external factors influencing performance – for instance, the weather, misconnections, even dogs fouling the beach. "This is our first experience of an ODI where we are not in complete control," he explains. "As you move towards an outcomes based approach, by definition you give up a bit of control…The question is, how should the penalty/incentive mechanism work against that backdrop?" TWR

INCENTIVES START TO BITE

Two rewards, one penalty and lots of issues surface from Ofwat's first draft determinations of in-period ODIs.

We had our first glimpse of Outcome Delivery Incentives (ODIs) in action this month when Ofwat issued draft determinations for three companies on the back of their 2015/16 performance. As the chart shows (Moody's analysis of company annual performance reports), on average companies reported more net rewards than penalties in year one of AMP6, but most opted at PR14 to wait for a reconciliation at PR19. Three firms chose to have some payments applied between price reviews.

- Severn Trent: The company has been awarded the full reward it claimed, a hefty £18.8m extra on its wholesale price controls in 2017-18 (for one year only). This comprises a £0.98m reduction on the water side, and a £19.8 increase on wastewater, reflecting its outperformance on its category 3 pollution incidents target by 32%, its internal sewer flooding target by 21% and its external sewer flooding target by 7% in 2015-16. The bill impact for an average Severn Trent combined customer is a £6 increase (for 2017-18 only), comprising a 50p reduction on water and a £6.50 increase on sewerage. Severn Trent voluntarily gave up £1m of additional ODI revenue, for reasons relating to a leakage calculation error and in respect of customer perceptions following a small number of larger supply loss incidents.
- Anglian Water: Anglian too was granted what it asked for – a £0.5m increase in its water price control for 2017-18, on the back of leakage outperformance. Its leakage in 2015-16 was 189 Ml/d as against its performance commitment target of 192 Ml/d. This equates for the average customer to a 27p water price rise for next year.
- South West Water: The situation at South West was more complicated. Ofwat issued a draft determination without the company's request, after identifying a "material error" in the information the company provided. It said South West should incur a net penalty of £1.7m in 2017-18, comprising a wastewater penalty of £1.9m (largely a result of missing its target on category 1 and 2 wastewater pollution incidents by seven incidents), partially offset by a small net reward of £0.14 million in water. This would result in an average wastewater bill reduction of £2 for 2017-18. However Ofwat said it was minded to accept a proposal put forward by South West and backed by its independent WaterShare panel to defer the penalty to PR19, when it could be offset against the £3.56m end of period rewards the company accrued in 2015-16 – with a view to keeping bills smooth. For now the regulator will not adjust South West's wholesale price controls for 2017-18, but will make a final call next year.

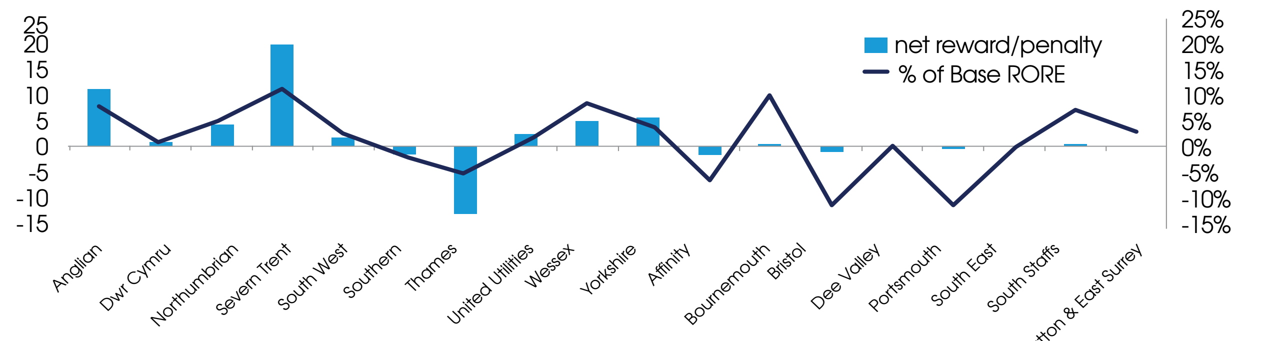
Supporters and critics

ODIs were at PR14, and continue to be, divisive. Ofwat of course wholeheartedly backs them, arguing they drive good behaviours and allow higher baselines to be set continually as companies beat commitments. Our coverage of a project to analyse leakage ODIs for 2015-16 seems to support the case that ODIs drive behaviours (see p28). However, the Consumer Council for Water's position is that they are unpopular with customers. Bernard Crump, central and eastern regional chair, said: "We have never been comfortable with the concept of ODIs. In our research, customers were opposed to rewards for what they saw as companies doing the day job, and were lukewarm about penalties. While we recognise that Anglian and Severn Trent improved their performance last year, they did so against targets that were – in some instances – less challenging than they could have been. The result is bill increases for customers".

Later this month Ofwat is due to issue a consultation. Some key questions for that, arising from these draft determinations and other sources, include:

- If smooth bills trump the benefits of in-period adjustments, as the South West decision seems to be indicating should all true-ups be at the end of each price control period?
- How much do customers value rewarding/penalising company performance against individual aspects versus overall performance?
- Does the legitimacy of ODIs hinge on how stretching the targets are?
- What is the best balance between comparability company to company and the reflection of local views (common v bespoke ODIs)?
- How should the regime deal with rewarding/penalising companies for results that are to some extent out of their control? (see p16). TWR

COMPANIES' REPORTED REWARDS AND PENALTIES AGAINST ODIS 2015-16



Absolute amounts (left hand scale) and % of base RORE (right)

CHANGE: THE NEW NORMAL

Infrastructure industries must embrace uncertainty and ongoing change if they are to thrive in today's world. In particular, they should learn global lessons and consider repurposing under utilised assets.

Three speakers at an Indepen Forum event in London last month had a stark message for infrastructure industry stakeholders: innovate, or die. And that doesn't mean getting to grips with a single new development or going through a nailed-down change programme. It means living with change continually; embracing it; and always being fit to adapt to capitalise on new opportunities and manage new risks as they arise.

The October Indepen Forum – a regular discussion group for infrastructure sector leaders, investors and regulators – sought to extrapolate lessons for UK infrastructure from other countries and other industries. Its three expert speakers brought global experience covering multiple sectors and multiple disciplines. To get the ball rolling, one of the speakers shared her views on the level of change in world markets. "The amount of change we are currently going through is gobsmacking, and it is no way near done," she said, explaining one of the biggest drivers is technology. This determines not only what companies can do, but also what consumers expect, which in turn can prompt further change within companies, the evolution of new business models, the entry of new players and even new markets.

She went on to share a few examples of how momentous change might affect specific sectors:

- Infrastructure – Assets may be built differently – for instance, using 3D printing and modular design. Consumer usage patterns may significantly change and more data will reveal who uses what and when which could affect, for instance, how utilities prioritise their investments. There could be predictive profiling. How customers pay will change, as will how assets are monetised – will all assets be shared in future?
- Education – Traditional three or four year degrees will become a thing of the past. Students will identify and digest information differently, including through the likes of YouTube.
- Healthcare – Self diagnosis will grow, as will preventative medicine. How hospitals are used will change.
- Roads – We already have self-driving cars. Behavioural change, such as the growth of remote working, will mean the road use and peak road use patterns of 20-30 years ago will alter and the network will need to adapt.
- Energy – Distributed generation, self sufficient homes and storage technology developments. We can expect further changes in the way energy is generated, traded and consumed.

Alongside the specifics relating to each sector, the speaker said there is a common theme of reusing under-utilised assets in new and different ways. The taxi platform Uber and holiday rental platform AirBnB are thriving on that principle already.

The new normal

Another speaker offered the following chilling examples of the consequences of failing to effectively innovate:

- Kodak and Blockbuster, who failed to move with technological progress.
- US and European car manufacturers who underestimated the quality and efficiency of Japanese and Korean competitors.
- Osram and Philips, who are now exiting the lighting sector as they are unable to compete with challenger companies who have flourished since the development of LED lighting lowered barriers to market entry.

Water companies that want to avoid such fates need to learn the lessons of such experiences and consider whether they are truly able to see what is coming down the line. The honest answer to that will always be 'no'. The recent history of the UK energy industry illustrates the twists and turns that policy change alone can bring: the rug was pulled from under carbon capture and storage; renewables subsidies have fluctuated; gas has been both a good guy and a bad guy. So rather than predicting the future, the speaker said: "The key for infrastructure companies is therefore to nurture the ability to adapt and innovate."

Another speaker developed the theme, arguing what companies really need to do is embrace "the new normal". She explained quite simply that "business as usual no longer exists" and that while we must make use of our past experiences, we also need to "shed the arrogance" of thinking we can plot a precise "roadmap for the future".

Her fellow speaker added: "The reality is we can't see where change is going to take us, nor how far nor how fast." She urged organisations to be vigilant, resilient, flexible, and have a "modular mindset" – the ability to take strategies and ideas, continually assess them as developments unfold, break them up into their component parts, and reassemble them as the context demands.

She added that companies must think strategically and look forwards, and must not fall into the trap of believing the past can reveal the future, observing: "Legacy thinking is worse than legacy assets!" The message: "We need to retrain ourselves to accept uncertainty as the new normal and to continually embrace change."

Plus ca change?

In discussion following the opening presentations, some attendees at the Forum disputed the premise underpinning all three speakers' talks: that times of great change are new. One argued change has been a constant state since the beginning of time. Those that lived when the first book was printed, when prospectors struck oil, when canals were dug and railways built would have felt as we do now. Moreover, to forget the lessons of history because we imagine the future will be so different would be a grave mistake.

Others questioned the inference from the debate that the UK performs badly on innovation in infrastructure and is ignorant of better practice elsewhere. One pointed out that in infrastructure industries in the developed world, the UK is seen a leader on innovation – particularly on customer engagement, regulation and asset management. Another said there is no obvious evidence that UK utilities that have been active in overseas markets (e.g. National Grid in the US), or that are owned by foreign players, have reaped any particular benefit. He added that if there was genuine innovation elsewhere, it is unrealistic to imagine the information and experience wouldn't find its way to these shores.

However, most appeared to concur that the speed of change today, and the types of change technology is enabling, is unprecedented. For instance, social media and other emerging channels mean individual members of the public can make their views heard. One participant commented that this will force companies to adapt to collaborate with consumers on an individual level, and will result in the public having a stake in decision making. This begs the question: how can water companies get fit for whatever the future throws at them?

Addressing blockers

Part of the subsequent discussion focused on identifying and addressing barriers to innovation here in the UK. Those identified fell loosely into three main categories (though there was little agreement among delegates on either what the obstacles are or how they might be challenged).

Policy: One participant shared with the Forum the statistic that it takes an average 30 years for an invention to be fully commercialised; at the fastest pace, 20 years. Thirty years is six parliaments, which means there is plenty of opportunity for the playing field that triggers an innovation to be churned up before that innovation is ready for market. There is therefore a mismatch of timescales (which is further complicated by the much faster timescales of IT and technical developments) and it is difficult to line things up.

Regulation: Many participants raised variations on the theme of regulatory barriers to innovation. Chief among these was risk: regulatory aversion to it, which drives risk aversion in companies; limited regulatory understanding of risk and consequent timidity in allocating and financing risk; a (long and resource intensive) uphill struggle for those who want to deviate from accepted practice; and the general mismatch between the nature of innovation (dynamic, spontaneous) and the nature of regulation (planned, cyclical).

However, one regulator present rejected these criticisms, arguing his organisation essentially agrees a sum to provide a service – beyond that, it is companies' choice how services are provided and how schemes are delivered. Another attendee observed that some of the most innovative companies in the UK energy space are the regulated gas networks – out-innovating both generators and competitive suppliers.

Companies: One Forum member spoke of "legacy thinking" in the water companies – a default setting borne of experience since the Victorian era that building assets is the answer whatever the question. He said this prevents consideration of alternative approaches or the repurposing of existing assets. Another said innovation is justifiably not very high on the agenda of infrastructure industry CEOs; yet another that the size and nature of many utility businesses makes innovation difficult – indeed, that many would "go crazy" in a world of absolute flexibility where little was assured.

However others raised counter points. One company representative rebuffed the accusation of legacy thinking, citing in example the fact that less water is put into supply now than decades ago despite rising population and without a major new resource being built. On a related note, the chair raised the issue of transition: how we might manage the change of use of legacy assets and how we might effectively monetise them.

One of the speakers declared she was "gobsmacked" to hear some in the industry did not consider innovation a subject worthy of the CEO agenda. On the size issue, a speaker cited GE as an example of a very large company that has managed to stay nimble, innovate and gain market share. Another offered up DC Water in the US, whose leader five years ago really shook things up – from striking innovative financing deals and raising millions for infrastructure, to powerful public engagement. For instance, instead of staying out of the way of the press, the business now employs 14 PR professionals and publicly responds to problems such as burst pipes in such a way as to engage the public and educate them on the need to invest.

Innovation ingredients

Aside from addressing any perceived obstacles to innovation, the Indepen Forum also looked at factors that might positively encourage it. One of the speakers offered that pockets of innovation are identifiable globally, and that in many instances, these are driven by simple necessity. For instance, the water authority in Perth has refocused on desalination, reuse and recharge in the face of drought; while Singapore's national water agency PUB is widely regarded as world leading on innovation, because it has had to be creative to ensure supply meets demand in such confined territory.

Aside from necessity, the speaker identified leadership and collaboration as vital ingredients. She said innovation and the delivery of better outcomes must be led from the front and applauded those who have had the bravery to act to successfully deliver change in their organisations. She also extolled the virtues of cross nation and cross sector collaboration, particularly in infrastructure industries which are interlinked and face common challenges including ageing assets, flooding and population growth. At present, she said there is still a lot of silo-thinking and separate working, so this is an area where improvement is clearly possible. For those operating in competitive markets, it will however be important to find the right balance between collaboration and competition.

> **We can't see where change is going to take us, nor how far, nor how fast**

More generally, the Forum heard that transparency could only be positive for innovation, and that it is critical to cultivate the right mindset. For instance, part of PUB's success is because it is not afraid to fail. As in any change scenario, altering ways of thinking and behaviours can be one of the hardest aspects – particularly in industries where many key individuals are long servers.

Finally, the Forum heard that for any organisation wishing to try something new, there is a need to bring stakeholders along too. This might mean reassuring a quality regulator of safety; convincing an economic regulator of efficiency; getting the buy in of investors and financiers; winning over customers; incentivising supply chain companies so their interests are aligned with that of the main company; and/or many other things. TWR

THE WEST COUNTRY TO WEST AFRICA

Wessex Water has a clever and mutually beneficial way of involving its contractor partners in its support of WaterAid – with life changing effects, both in Madagascar and back home.

Back in the summer, The Water Report marked the 35 year anniversary of WaterAid with a look back at its incredible history – from its creation in 1981 by inspired water industry leaders right through to its achievement to date of helping 25m people in 38 countries access safe water. The theme of that piece was the water industry's partnership with the charity through thick and thin.

Now we are launching a new occasional series looking at WaterAid's partnership with individual water companies: the story, latest activities, and what the relationship means to all parties involved. We start this issue with Wessex Water and in particular the resourceful way in which the company involves its supply chain in raising funds and awareness for some of the world's poorest people.

Wessex For Africa

In 2008, Wessex Water set up the Wessex for West Africa scheme (last year the name was adjusted to Wessex for Africa and Madagascar was chosen as the focus country for fundraising). The idea was for Wessex to raise funds for WaterAid and spread its messages to a wider audience by facilitating the involvement of its contractor partners in helping a specific geographical area.

Managing director Andy Pymer explains Wessex had previously involved its contractors in other ways – the flagship event being a biennial race night that many supported. But Wessex for West Africa took this to another level by involving many of its key suppliers in a year-round calendar of events, for which they pay a fee to cover costs, with the remainder going to WaterAid.

Wessex's head of wholesale services and business change Steve Arthur says the idea was triggered by "people and their passion – for us this is something more than just a bit of CSR". In particular, he attributes the contractor partnering idea to Wessex director David Elliott, who he describes as "a true innovator". Arthur continues: "A lot of people know about the great work water companies do for WaterAid – running marathons dressed as a tap, salary donations and that sort of thing. But David and

WaterAid looked at how we could develop our relationship further. We realised there were suppliers we were spending hundreds of millions of pounds with and we thought 'how can we leverage that'?"

So the idea of Wessex for West Africa was born. The scheme offers contractor partners a number of benefits for the year:

- *At least three* business breakfasts and two dinners which act as formal networking opportunities with each other and with Wessex Water.
- A place for one person on Business4Life – a staff development scheme which Wessex has run since 2005. The scheme places 12 up-and-coming staff members (six from Wessex and six from contractor partners) together for a year during which time they take part in management training sessions in subjects like marketing, financial control, project management, negotiating and presentation skills, and spend some time with WaterAid finding out about fundraising and charity law. The team is challenged to raise funds for WaterAid over the 12 months with the last group raising over £55,000. There have been seven groups to date and they have collectively raised around £240,000.
- A place on a bespoke trip to one of WaterAid's country programmes to see the difference their fundraising is making to people living in extreme poverty. Contractors visited Nigeria in 2008, Mali in 2010, Burkina Faso in 2012 and, in September this year, Faratshio in Madagascar. In the latter, they saw where their money was being used in a community water scheme that will benefit a number of hamlets, schools and medical centres.
- In addition, contractors are supported to raise money within their own companies and among their own network of suppliers – for instance, help planning a black tie fundraising ball. Arthur says this amounts to a "virtuous trickle-down effect" through the supply chain.

So far, and excluding any additional donations contractors have made under their own steam, Wessex for Africa has raised approaching £400,000 (and this doesn't include the Business4Life contributions). Clearly fundraising is the main objective, but it is

PICTURES COURTESY OF: WATERAID/VALISOA BAST

WESSEX FOR AFRICA IN CONTEXT

Wessex Water managing director Andy Pymer has been with the company for 24 years – not quite back to the time WaterAid was founded in 1981, but not far short. He describes Wessex's relationship with the charity over the years as "very, very strong", being built on both a genuine desire to help those who are in the most basic state of need, and good business sense.

He explains where Wessex for Africa fits in to the company's broader relationship with WaterAid.

He identifies the involvement of Wessex's supply chain partners as one of four key layers of the company's activities with the charity. The others involve:

- Customers – inserts in Wessex customer bills lead to donations to WaterAid of around £1.6m a year. In addition to raising much needed funds, Pymer says the fact that Wessex shares a goal with its customers in supporting WaterAid – helping everyone, everywhere have access to safe water and sanitation – gives the company "a good point of connection" with those it serves.
- Employees – no one in the industry can be unaware of the amazing levels of dedication and commitment that water company staff show to their sector charity, and Wessex people are no exception. Pymer says "a tremendous amount" goes on. He recalls the first time he was closely involved with a fundraiser was in 1997 when the company held the world's biggest duck race, launching 100,000 plastic ducks into the River Avon (he has the Guinness Book of Records certificate to prove it). He points out that on top of the fundraising benefits for WaterAid, involvement with charity events has benefits for the individual too: learning new skills (such as project planning or liaising with the media); personal and professional growth; increased job satisfaction; and a renewed appreciation for the day job of providing vital water and sanitation services to customers.
- The business – in addition to the above, Pymer says involvement with WaterAid brings together people in different departments within Wessex, and people in different companies across the country, helping them build relationships that in turn help the business to run smoothly. He adds that the company's partnership with the charity has survived privatisation and many other twists and turns over the past 35 years because Wessex's ethos as provider of an essential public service persists. "We have a strong moral imperative to be a force for good," he explains. "It's a natural fit for us, a natural extension of our work on public health protection for our customers… Sometimes artificial barriers are put up between people because of where they are from and so on, but deep down we all have the same hopes and aspirations; we all want good lives for ourselves and our children. We have far more in common than divides us."

also clear that a key element of the programme's success is the business benefits it provides to contractor partners.

Supplier view

Richard Brown is managing director of Selwood Pump Rental Solutions. The company has been a Wessex Water supplier for over ten years and one of its framework suppliers for at least eight of those. It signed up as a Wessex for West Africa partner in 2012 after attending one of the programme launch evenings Wessex hosts annually – and has been partnering every year since. "Why wouldn't you?" Brown questions, saying the partnership is fantastic value from a business point of view as well as valuable in helping some of the world's poorest people. It cost Selwood around £7,000 in 2012, and £9,000 this year (there is now a menu structure, where partners pay around £3,000 for each main element, enabling them to pick relevant aspects and tailor to budget).

Brown (below top) and locals collecting water in Faratshio. Below right: a host family.

On the Business4Life programme, Brown says the training is "second to none, and would cost three times more if you paid commercially" (much of the training is donated by Wessex). He describes the incredible personal and professional growth he witnessed in one young person Selwood put through the programme, adding that person was promoted six months after the course completed. On the business breakfasts, he says they are always well attended and informative – and most importantly, facilitate excellent networking with both Wessex directors and senior level staff of fellow contractor companies.

But it is clear from speaking to Brown that going on the trips – he went on both the Burkina Faso and Madagascar visits – has transformed his view of the partnership with Wessex: from a beneficial business arrangement first and foremost, to a cause to enthusiastically embrace in its own right. "Everything changed for me," he explains, recalling his first visit to Africa, "from thinking of WaterAid as just another charity to seeing what their work means in real life to real people. It makes you so grateful for what you've got, and makes you realise how important clean water and sanitation is… To hear it, see it, touch it and feel it first hand – it really gets to you."

He retells a few experiences from his trips that stay with him as powerful – and motivating – memories. From Burkina Faso, where there was "no water to be seen anywhere" and where drinking for the local people meant walking 2-3km to a dried up river bed and digging down to pools of muddy water. He remembers thirsty children lying flat on the mud to drink it, and mothers scooping it into the mouths of their babies. And he remembers the village elders explaining to him that those who couldn't afford medical care for the diarrhoeal diseases that are rife, often simply die.

From Madagascar he recalls seeing villagers filling containers from a stream that a few moments later a passing animal defecated in. There, 11.7 million people don't have safe water, 88% don't have access to improved sanitation and 2,100 children die every year from diarrhoea caused by unsafe water and poor sanitation.

Brown tells too of coming back to England so inspired that "despite not having done any exercise for years" he and 21 colleagues took on the Three Peaks challenge and raised £22,000 for WaterAid. TWR

PICTURES COURTESY OF: WATERAID/VALISOA BAST

PR19: less help, more stretch

Speaking at a water sector conference hosted by Moody's last month Ofwat chief executive Cathryn Ross told companies Ofwat would not tolerate the behaviour it suspected in PR14: firms working their business plans backwards from flat bills. "If any company out there now is thinking of working their business plan backwards from a flat bill, still less a baseline of flat bills with various 'resilience increments' on top, it ought to be obvious by now that this is not what good will look like," she said. She offered as an illustration the possibility of reducing bad debt costs from £21 to £9 as a way of offsetting – for instance – the £4 average additional cost Water UK's long term water resources report published last month calculated would be needed to build resilience to drought.

Pursuing aggressive efficiencies and catering for resilience were among the themes for PR19 Ross highlighted in her Moody's speech. Elsewhere she said Ofwat would:

- Offer more clarity upfront than it had at PR14 on what good looks like – by setting out principles rather than a "cook book". The trade off would be it would not do as much "hand holding" through the process, particularly given the extra workload that will result from six price controls.
- Seek stretch in terms of customer service – partially a result of its recent detailed scrutiny of competitive markets. This will include integrating great service for customers in vulnerable circumstances.
- Extend opportunities for outperformance. As well as totex and financing outperformance (as Ofwat planned to stick with its sector wide notional approach to the cost of debt and equity), she said she was "interested to explore the scope for putting more money at risk through ODIs".
- Be able to take "a more nuanced approach to assessing the loss of a comparator" in light of more markets, further separation of price controls and the greater information these would bring.

Ross acknowledged the widespread political and economic uncertainty Brexit had brought for the country, but emphasised elements of continuity in water, namely: the ongoing importance of customer legitimacy; the continued investability of the sector; and Ofwat holding a firm course on market reform. She firmly shut down any suggestion that Ofwat should put its reform plans on hold given the disrupted backdrop: "I have had conversations with various people from the sector and the investor community since the Brexit referendum result…one or two of them have followed that with a suggestion that – what with everything else going on at the moment – 'now is maybe not the time'. Well, in my view, now is exactly the time. Now more than ever. And that goes right back to everything I said in my speech here last year about the imperative of this sector finding ways of delivering more for less if it is to maintain customer legitimacy in face of the combined challenges of service delivery, resilience and affordability."

OBITUARY – DR JON HARGREAVES

Dr Jon Hargreaves, CBE F.I.C.E., the first chief executive of Scottish Water, has died aged 66 after a short illness.

Jon was a scientist by training but spent most of his working life involved in the water industry at home and abroad. Born and raised in Lancashire, he graduated BSc in applied biology and was awarded a Doctorate from Durham University.

He began his career at Northumbria Water in 1975 and became managing director of Northumbrian Water, in 1993. He was also managing director of ENTEC Europe and managing director of Northumbrian Lyonnaise International.

In July 2000, Jon joined East of Scotland Water as chief executive and in April 2002 was appointed Scottish Water's first chief executive. He played a pivotal role in leading the transformation of water services to customers in Scotland. He retired from Scottish Water in November 2007 and pursued a number of chair and non executive roles.

It was always more than just work for this dynamic and charismatic leader. The need to provide safe drinking water around the world and a strong desire to clean up the environment was embedded in his DNA from the moment he first got involved with the water industry. He was a committed WaterAid supporter and believed every person in Scotland and in the world deserved the same safe drinking water. This ethos is at the heart of everything that Scottish Water does today.

He was passionate about the job of improving Scotland's water infrastructure and built a strong team to improve the service to Scottish Water's customers and the network. He imbued a belief in everyone who worked with him that anything is possible if you work together and believe it is the right thing to do. Under his stewardship Scottish Water quickly established real improvements in its first few years, driving charges down and ensuring Scottish Water delivered the investment the country needed.

Scottish Water is today providing an industry leading service to its customers – and that is no small part due to Jon's inspiring leadership, having laid the foundations of the successful public utility we have today.

Jon will be greatly missed by his many friends and colleagues in Scottish Water. He is survived by his wife Hilary, who supported him throughout his career, daughters Clare and Kate and three grandchildren.

An abridged form of the obituary penned by Ronnie Mercer, former chair of Scottish Water. With thanks to Scottish Water for providing this.

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Flush out the truth: Water UK has written to Trading Standards to condemn misleading claims that wet wipes and other sanitary products are suitable to be flushed down toilets. A global statement signed by more than 247 companies in 18 countries has recommended consumers must be given unambiguous information about appropriate disposal methods of products. Water UK said it costs £88 million a year to unblock sewers.

Condition B: Ofwat is consulting on a licence modification that will enable companies to "levy charges to recover shortfalls in revenue in previous charging years that are calculated in accordance with the Wholesale Revenue Forecasting Incentive Mechanism, regardless of the annual limits on the change in revenue in the price controls for wholesale activities that we set for the 2015-20 period".

Lords on Brexit: The EU Energy and Environment Sub-Committee is continuing its short inquiry on environment and climate change policy after Brexit. Water UK's environment director Sarah Mukherjee was among those who gave evidence at the start of the month.

British Water CEO: British Water has appointed Lloyd Martin as its chief executive.

RAG update: Ofwat has published updated Regulatory Accounting Guidelines for 2016-17. These factor in changes including on water resources and sludge markets, outcomes reporting and disclosure requirements.

THE WATER REPORT
COMPETITION WATCH

CCW: which household scenario is most likely?

The Consumer Council for Water, Ofwat and DEFRA are understood to be in discussions about prospects for domestic competition following the consumer watchdog's intervention to say the economic regulator's cost benefit review was "overly optimistic".

Specifically, CC Water has called on Ofwat to identify which of the four possible scenarios it scoped out in its September submission to government was the most plausible outcome. The most positive scenario included strong competition, widespread innovation, low cost and a net present value of £2.9bn; the least positive scenario included weak competition, little innovation, high cost and a NPV of -£1.45bn.

The water watchdog last month wrote to the industry regulator challenging some of the more positive assumptions it made. In particular, Ofwat's best case scenario showed the savings that would be available to customers would be around £8 a year; CC Water argued this would not be enough to persuade many people to switch supplier.

Chief executive Tony Smith said: "We are not convinced by many of the more positive assumptions that Ofwat has made in its analysis. In particular, we question how many water customers would be interested in switching supplier for such a small amount of money. We are also concerned that large numbers of customers, particularly the elderly and others living in vulnerable circumstances, may not participate actively in the market and that could cost them money."

Smith added: "We do not want to see the water sector experience the same problems that have affected the energy market."

The Competition and Markets authority is studying digital comparison tools, such as price comparison websites and switching apps, across markets. The findings would be relevant for water, should the government opt for household switching.

WSSL fees to be based on market share

Ofwat has set out how it plans to fund its administration of, and CC Water's work on, the new Water Supply and Sewerage Licensing (WSSL) regime on an ongoing basis.

In a consultation published last month, the regulator proposed recovering 10% of its costs through a flat fee, shared equally between all WSSL holders, with the remaining 90% allocated to licensees on a variable basis based on their market share. Market share would be defined according to wholesale charges paid. Ofwat explained it wanted to keep the flat fee element low to avoid the cost being a barrier to entry for those with only a small number of customers. These fees will be on top of the one-of application fee of £5,250.

Noting that "costs of regulating the WSSL regime are uncertain" given the market is new, the regulator provided some indicative cost estimates. It calculated the total cost of regulating the new market – this would cover, for instance, the cost of setting price controls, managing code changes, resolving disputes, monitoring and enforcement work and associated legal costs – would be £725,000 in 2017-18. In line with MOSL's approach, it allocated 50% of these costs to the WSSL licensees and 50% to the undertakers, giving a total estimated cost to the WSSLs for 2017-18 of £363,000.

Ofwat assumed there might reasonably be 35 WSSLs in the first year, which implies a fixed fee of £1,036 each and variable costs of £326,000 in total, at a cost of 27p per customer (based on 1.2m customers). It added that it would adjust fees annually to take account of any under- or over-estimate of the costs.

CC Water proposed its costs be recovered slightly differently. It put the total cost for monitoring the WSSL regime and handling complaints and enquiries at around £0.43m in 2017-18, and allocated 64% of these costs to the WSSL licensees and 36% to the undertakers. This gave a total estimated cost to the WSSLs for 2017-18 of £0.28m.

Licensees will be obliged under condition 9 of the standard conditions of WSSLs to pay an annual licence fee (DEFRA has issued updated standard licence conditions).

Ofwat added that it was conscious that turnover is uncertain until the market opens and that cash flows will be uncertain for some time. It suggested the following solution:

- For year 1 (2017-18) of market operation, it will delay the annual invoice until October and use data from the market operator to allocate variable elements based on wholesale charges paid as at 30 September 2017.
- From year 2 (2018-19) onwards, it will issue an annual invoice early in the financial year.
- It will charge WSSLs supplying eligible Welsh customers on the same basis as WSSLs operating in England.

Ofwat has also issued a revised application form and guidance document for WSSLs, for use from 1 November. These have been updated to include information in relation to the following:

- Information about self-supply applications.
- An option for applicants to apply for a wholesale or supplementary authorisation to allow them to introduce water into an appointed water company's network.
- Further guidance on the three requirements the regulator assesses against – managerial competency, financial stability and technical competency.

Since we published last month, WSSLs have been granted to Business Stream, Cobalt Water, Pennon Water Services and Thames Water Commercial Services. South East Water has applied for a national WSSL through its non-trading subsidiary, Invicta Water. The move follows an application in July by South East Water for a sewerage retail licence to provide services in its water supply area. Invicta will retail water and sewerage services in England under the brand, Water Choice South East. The parent company will provide water and sewerage services in its home patch as South East Water Choice.

NEW ENTRANTS FACE HIGHER BARRIERS TO ENTRY

Moody's analysis finds financing advantages for associated retailers

Water retailers that form part of a wider group could enjoy a competitive advantage over stand alone new entrants. Meanwhile, wholesaler risk exposure would increase significantly should the household market be opened to competition.

Those were two of the findings contained in a Moody's report on the retail water market issued last month. On retailers, firstly, the ratings agency said those in larger groups would secure working capital facilities and required payment protections on more favourable terms than their smaller competitors. Moreover that a requirement under the Wholesale-Retail Code for the retailer to maintain a minimum investment-grade rating may be difficult to achieve for a standalone new entrant, and an additional collateral requirement to offset weak standalone credit quality could be expensive.

Moody's modelled the credit quality of a hypothetical water retailer – "a small to medium-sized company with an existing footprint in the market, such as an incumbent water company's retail subsidiary, or a new entrant with a customer base acquired from an incumbent water company that has exited the competitive retail market". It rated the stand alone credit quality of this hypothetical company at single-B – weak, reflecting along with financial metrics aspects including relatively small size, lack of track record in a newly-opened competitive market, and limited ability to differentiate services.

However the ratings agency said retailers that are subsidiaries within the wider group of an incumbent water company should enjoy credit quality "broadly similar" to that of an existing integrated water company. The average water sector rating is around Baa1. Moody's said: "Such implicit or explicit parental support could come in the form of debt or performance guarantees, or even the integration of the competitive retail activities within the holding company that sources financing for the entire group." It noted that while regulated water companies' licences prohibit direct cross-subsidisation or guarantees from the regulated monopoly business to affiliated companies within the wider group, parent holding guarantees could create substantial benefits, providing access to an investment-grade credit profile. This may also significantly reduce the water retailer's costs in providing credit support under the arrangements with the wholesaler.

Retailer credit metrics will be important in the new market because retailers will act as cash collection agents for wholesalers. Ofwat has put in place a number of credit options for the market, but because of a likely mismatch of payment cycles in some instances (between retailers having to pay wholesalers, and retailers collecting payment from customers), retailers will need financing liquidity and access to working capital. This is exacerbated by the fact that retail margins are inherently low. Moody's observed: "While the proposed credit terms provide protection for the wholesaler, the potential costs of maintaining 80 days of working capital as cash collateral or procuring alternative security could erode the retailer's margin." In this environment, controlling cost to serve will be critical; Moody's advised that particular focus should go to the cost of bad debt and debt management, "which may account for up to a third of the total in any given year".

Wholesaler risk

Some retailers could pay the ultimate price of poor credit credentials – going under. Ofwat has made provision for customer protection should their supplier go down. It has made provision for wholesalers too, by giving them a greater share of protection than retailers in its credit terms. Nevertheless wholesalers will be exposed to greater counterparty credit risk that at present: "Monopoly incumbent wholesalers will swap exposure to a multitude of diverse business customers for exposure to a far smaller number of retailers, and potentially just one, which are likely to have low credit quality," the paper pointed out.

Moody's considers the level of exposure to risk to be manageable for wholesalers while the market is confined to non household customers. "Ofwat currently assumes an average payment cycle of 80 days. This would result in a maximum loss of around 4.3% of one year's revenue for the wholesaler in the event of retailer default, for the NHH business."

However, this would "increase significantly" should the household market be opened – to a maximum loss of 17.6%. Stefanie Voelz, vice president of the infrastructure finance group, described this as a "step change" in risk, with wholesalers potentially exposed to "six counter parties, not 600,000". She added that of all the reform elements currently on the table, domestic competition carried "the most risk potential".

Moody's has published previously on upstream reforms. In summary, it sees limited risk in a water resources market as it has

Parent holding guarantees could create substantial benefits, providing access to an investment-grade credit profile.

been scoped out, given existing assets will be largely unaffected. A sludge market in itself, said Voelz, was "relatively small beer" though it heralds a more risky direction of travel in "slicing and dicing the RCV on a focused basis". More detail is needed on exactly how the transition to CPI will be managed before its impact can be assessed.

Aside from market reform, Moody's identified persistent low interest rates as a significant credit pressure for water sector finances post 2020 (see report, p13). TWR

SHOULD LEAKAGE BE REDEFINED?

If retailers lead on supply pipe leaks once the market is open, should leakage be redefined to cover distribution losses only? That was one of many questions on market reform debated at this year's Water UK Leakage Conference.

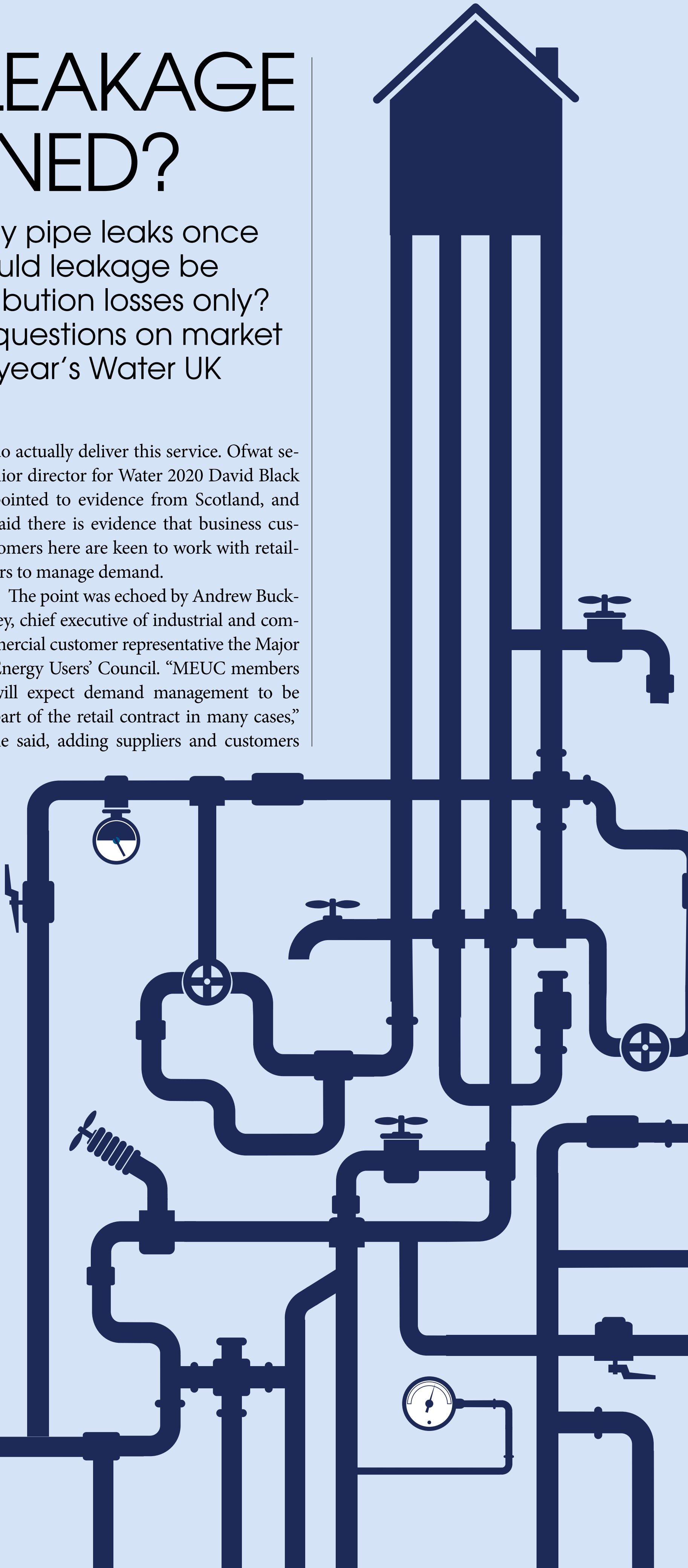
What might market reform mean for leakage? As wholesalers and retailers struggle to get their houses in order ahead of business retail market opening in April, you could be forgiven for thinking that isn't the most pressing question of the moment. But some of those who specialise in leakage believe market reform could have a profound effect on their work. In fact, taken to its logical conclusion, market opening could ultimately lead to leakage being redefined.

The impact of business retail competition imminently, and household retail competition potentially, was one of the key themes under scrutiny at this year's Water UK Leakage Conference. Held last month in Birmingham, the event was chaired by former Thames Water chief executive Martin Baggs, and brought the industry together with regulators, consumer representatives and many other stakeholders to discuss developments and horizon scan.

So how could retail market opening lead to the alteration of the very definition of leakage? The issue hinges on what separating retailers from wholesalers will mean for customer side leaks. Discussion at the conference illuminated the fact that, despite being just five months away, there is not a common understanding of what will happen to leaks on business customer supply pipes once retailers and wholesalers are separate entities.

On paper, the market arrangements are clear: helping customers reduce leaks on the pipes they are responsible for is a job for retailers. Moreover, there is evidence from other markets that retailers do actually deliver this service. Ofwat senior director for Water 2020 David Black pointed to evidence from Scotland, and said there is evidence that business customers here are keen to work with retailers to manage demand.

The point was echoed by Andrew Buckley, chief executive of industrial and commercial customer representative the Major Energy Users' Council. "MEUC members will expect demand management to be part of the retail contract in many cases," he said, adding suppliers and customers



in energy have struck innovative deals to reduce consumption. "The energy experience suggests retailers did learn over time that customers are more profitable if kept over time. Helping customers to reduce their costs is part of that." He said this can be "a win/win/win situation" – for customer, retailer and wholesaler.

But throughout the day, a number of delegates expressed scepticism that without an obligation or incentive to reduce leaks, retailers may not always act. One question from the floor summarised the doubt: retailers will want to maximise profit, so what is their incentive to reduce demand? Another delegate expressed the view that it seems we are taking something of a leap of faith in retailers; we are essentially relying on the fact that they will offer consumption-saving services including on leakage to deliver cost savings for customers because the market's low margins won't allow much in the way of straightforward price discounts.

There was also discussion of the practical aspects of retailers taking on responsibility for customer side leaks. In a panel session on the greater use of markets in water, the need for good relations between wholesalers and retailers came up, if retailers are to help customers with network (and hence wholesale-type) problems. MOSL chief executive Ben Jeffs reassured delegates that the thinking on this had already been done and is contained in some 4,000 pages of code documents. He added that one of the biggest challenges will be ensuring arm's length relationships between hitherto unified companies; this is one of the aspects that should be practised in the shadow phase.

Consumer Council for Water chief executive Tony Smith picked up the point. "The retail/wholesale relationship will be absolutely crucial," he said, observing that the two interests "should be allies" but that it would be for each wholesaler to decide how they deal with each retailer in practice. Smith envisaged "it will be painful at times and there will probably be all sorts of battles" as wholesale/retail relationships are worked out – but ultimately this would be good for the market.

Household headaches

The leakage professionals at the Water UK conference seemed reasonably sanguine about these questions and concerns while the retail market is confined to businesses. Not so if the government opts to extend competition to households (see box below for speakers' views on this issue). Glen Mountfort, asset planning manager at South Staffordshire Water, presented on "the supply pipe challenge". He first shared some details of his company's position in terms of leakage: it is in a stable position on reported leaks and is content to sit within its Sustainable Economic Level of Leakage (SELL) range. However it is concerned by a trend of a rising number of reported leaks on customer supply pipes, at a time when there is a falling number of reported leaks on mains. Moreover it is aware of the incredibly long asset life expectations on supply pipes: it is aware of 0.06% of supply pipes a year being replaced, which infers an asset life of 1600 years (compared to 100-200 years for distribution mains). South Staffs currently assists customers with supply pipe fixes voluntarily, dealing with around 2,200 repairs per annum (of a total of 600,000 properties in its supply area). Mountfort noted that compared to other means of funding repairs – e.g. through insurance – this offers good value to the customer.

He went on to make a number of observations about the introduction of domestic competition as regards supply pipe leaks:

- The repair and replacement activity South Staffs currently undertakes would be difficult if domestic competition forced household retail separation; it may even breach level playing field rules.
- At present, the uncertainty over what will happen in the household retail segment is making it "difficult for companies to make long term strategic decisions" about their supply pipe strategies. He considered whether there is more risk in waiting for a decision from government or pushing on with trials regardless.
- Leakage and demand management is strongly linked to meter technology and read frequency. In a reformed domestic market, the wholesaler would own the meter (if the non household model is followed) but the retailer would be responsible for reading it. This would complicate practical arrangements.

These observations prompt a number of questions. How can holistic metering and data collection strategies for demand management be developed in a competitive market? Should the wholesaler take ownership of supply pipes? Who should pay and who benefits from smart networks? Mountfort made his view clear on one key aspect: "What is not right is the wholesaler having to manage leakage in a world where it loses control."

This led him to reflect on whether do-

VIEWS ON DOMESTIC COMPETITION

- **MOSL's Ben Jeffs:** Noting it will take a brave politician to open the household market in the wake of Brexit, Jeffs' view was that domestic switching is "inevitable" and the right way forward. "I believe in markets," he explained, adding his preference would be for swift action as a delay could "destroy value". Pushed for a timetable by chairman Baggs, Jeffs said a household market was feasible "before 2020". In part this is because the business retail market has been developed with micro businesses included – for instance, the Customer Protection Code of Practice and MOSL's systems – so could be adapted relatively easily to cater for households.

- **Water UK's Sarah Mukherjee:** The political will is there, but it is right to emphasise there would be customer resistance. If it happens, it shouldn't be for ten or so years.

- **MEUC's Andrew Buckley:** There should be a domestic market when the market can deliver a worthwhile margin. In energy, where potential savings are much higher, switching levels are poor and the CMA recently criticised customers for not engaging. With only minor savings on the table in water, Buckley remarked: "God help the water customer!"

- **CC Water's Tony Smith:** Customers are disinterested in a £5-10 saving. Only a small number would likely engage to save such a small amount. Ofwat's recently published cost benefit analysis is broad, looking at everything from an active, strong market to a slow, weak market. If it happens at all, domestic competition should not be until after 2020.

- **Martin Baggs:** People like an easy life and like saving money. If someone knocked on my door and said they could provide one bill (for various utilities) and save me money, I'd probably say yes.

AN EARLY VIEW ON HOW LEAKAGE ODIS ARE WORKING

A summary of a presentation given at the Water UK Leakage Conference by Andy Ball, head of asset management, South East Water.

Leakage was one of two mandated Outcome Delivery Incentive areas at PR14 but companies led on financial rewards and penalties. Different companies took different approaches. It is only year one of AMP6 so early days, but Water UK is supporting a project to analyse company approaches and the impact rewards and penalties are having on leakage activity. Fifteen companies are taking part. Emerging findings are as follows.

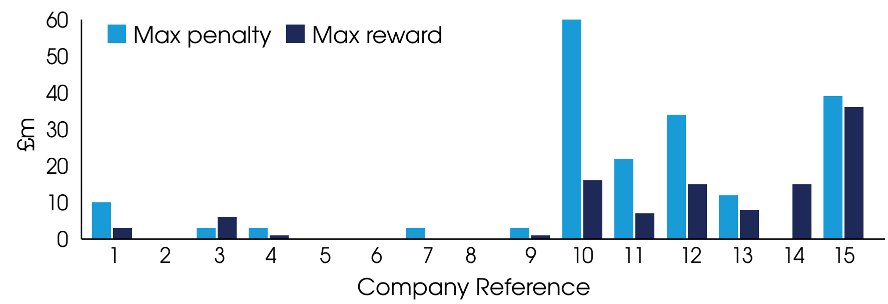
The leakage ODI picture is varied

- There is a wide range of penalties and rewards in place, from zero to a maximum £60m penalty and a maximum £36m reward. However there is consistency in that penalties are almost always greater than rewards - but by varying factors, from ten times to four times, to almost symmetrical rewards and penalties.
- Some have caps and collars while others don't.
- Some look at annual performance, others at performance over a few years.
- Some are payable in AMP6, others in AMP7.

What influence are ODIs having?

- ODIs are influencing company approaches to leaks. The study grouped companies into four categories, ranging from those to have no intent to outperform to those who have specific outperformance targets. See table
- 75% of companies are focussing on avoiding penalties.
- Those with rewards (these range from £1m-£36m) are chasing them. Some are going all out to obtain 100% of the reward on the table, while others are targeting just a proportion of the reward available. Altogether, those companies in the most active category are targeting 45.5Ml/d more leakage reduction than in their performance commitments. This would yield a reward of £55m of the total £106m available. See table and chart.
- On top of an ODI with a reward, South East Water has a customer satisfaction ODI which is influenced by its performance on leakage. It has improved customer satisfaction so far from 3.5/5 to nudging 4/5. For companies more widely, improved customer satisfaction resulting from improved leakage performance could have positive effects on SIM scores (where penalties are larger than for leakage ODIs).
- There is a mixed picture on whether leakage ODIs are driving innovation. Some companies are exploring new technologies, while others are focusing on getting better results from traditional approaches. Some are considering methodology changes.
- For those pursuing reductions, it is not cost free – you have to spend money to get the reward. South East Water's strategy is cost neutral.

WHAT ARE THE REWARDS AND PENALTIES?



COMPANY RESPONSES

Companies grouped into one of four groups

Group	No of companies
A. No intent to outperform – Inappropriate	1
B. No intent to outperform – ODIs not a big enough	6
C. Intent is to outperform – But no specific target	3
D. Intent is to outperform - Have a target in mind	5

Typical comments

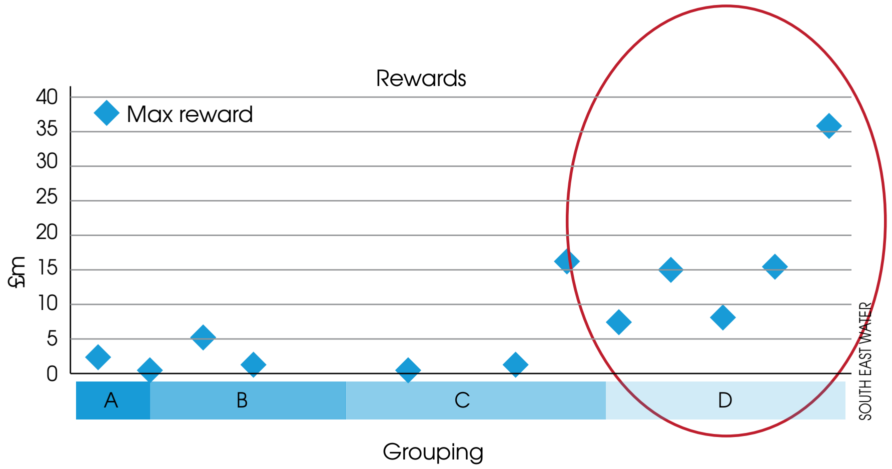
A. Customers did not support reward for leakage reduction

B. Analysis shows it's not cost beneficial…we are focussing on avoiding penalty

C. We are also investing in new software and equipment to improve leakage targeting and the funding for this has come as a direct result of the ODIs

D. The ODIs provided us with a real incentive. Our Board asked us to identify some ways to achieve ODIs and leakage is a key one for us

ARE REWARDS DRIVING BEHAVIOURS?



	Target Reward	% of Available
Max	£36m	100%
Min	£1m	7%

mestic retail market opening should result in leakage being redefined to cover only distribution leakage rather than total leakage. He observed those making market arrangements seemed confident retailers would be able to make a better fist of reducing supply pipe leaks than today's existing integrated companies, so why not "give them the responsibility?" Mountfort seemed sceptical on the merits of the belief. "How can retailers find leaks better than us?" he asked. He added it is "difficult to see what is driving retailers to reduce leaks" and questioned: "How are extra people in the equation going to help?" He concluded that all of this and more needs consideration and debate before any household market follows the non household model.

Market pros and cons

Before it moved on to other issues, the conference debated other pros and cons of market reform for leakage. Several people throughout the day raised issues relating to greater complexity resulting from the wholesale/retail split. A representative from United Utilities, for instance, questioned who would investigate queries on volumes for those charged with calculating leakage numbers for their companies. Told it would be the retailer, she responded that that would mean a lot more work – going to lots of different retailers instead of just her company's business retail team.

CC Water's Smith observed: "The first real test of the market will be when something goes wrong." He pointed out that all customers will remain customers of the wholesalers, regardless of their choice of retailer, and that water should learn from the energy experience and not let wholesalers become "too distant". The MEUC's Buckley endorsed the point: "There has got to be a customer access point to the wholesaler," he urged.

However, others pointed to the upsides for leakage management that would result from market opening. MOSL's Jeffs acknowledged that issues – be they between incoming and outgoing retailers or retailers and wholesalers – would surface, but stressed the key was how the market deals with them. "Customers must be front and centre of our minds as we resolve the issues," he said. He added that a pure benefit would be ongoing data improvements driven by the market. For instance, a third party that recently took on billing responsibility for a large multi-site customer chain found 12% of sites were under billed and 4% of premises were entirely missing. Retailer eyes on the market will drive better data.

However, an even greater prize according to Jeffs is that the retailers will be a new, informed stakeholder group who will form opinions on wholesale costs and service. They will "shine a light on wholesalers" and provide Ofwat with better information with which to regulate wholesale prices. He said it was "no coincidence" that Ofwat expects cost innovation to be driven through subsequent price reviews.

More widely, a number expected the market to drive innovation, including customer representatives Smith and Buckley. The latter commented: "We are really fired up by this. There is the opportunity to save cost by driving consumption down, and to rationalise suppliers. Better information can only improve the efficiency of the total system."

Resilience and leakage

Moving away from market reform, the other matter that dominated discussion at the conference was how the industry might up its game on leakage management. This is a perennial issue, but one that has come under the spotlight in recent months as resilience challenges have crystallised, particularly on water resources and drought. Anglian Water's regulation director Jean Spencer presented the findings of a research project she led on a long term planning framework for water resources. In short, this showed drought risk is more severe and more widespread than previously thought. For the leakage community, this means one thing: there is a need to innovate to manage demand and leaks better and, crucially, to set an example to customers who will necessarily need to reduce their own water wastage. "Customers don't understand why they should be water efficient if they see leaks happening," she summarised.

Spencer went further to suggest customers don't really get the concept of economic levels of leakage and hence that "the economic level of leakage doesn't cut it any more". She urged the industry to think innovatively and to take on the challenge of driving leakage down. The sentiment was far from universally accepted though. Dennis Dellow, leakage programme lead at UKWIR and technical consultant for Northumbrian Water, said leakage control should always be governed by economics "otherwise water companies will be expected to operate uneconomically". However he added there was scope for improving the existing SELL model and for "changing the economics" by driving costs down.

Regulatory levers

The conference discussed the various ways the industry might up its game. These fall loosely into two categories. Firstly, regulatory levers. Ofwat's Black recapped the current state of play. The PR14 settlement locked in a broad range in terms of companies' commitments to reduce leakage by 2020, ranging from 0% (those who already operate at or below SELL) to 14% at Affinity Water. The sector as a whole has committed to a 5% reduction by 2020.

Companies are free to choose how they go about making the reductions they have committed to, drawing on the outcomes and totex approach Ofwat has implemented. However they have been asked to produce annual updates on their performance on leaks. Data from year one shows all companies met or exceeded their targets in 2015-16 (see chart, p30). Some have significantly outperformed – for example, Dee Valley's target was 0% but the actual reduction it achieved was 14%. One delegate suggested to Black that the targets may have been too easy given the blanket outperformance; the regulator accepted the merit of raising the question.

> **What is not right is the wholesaler having to manage leakage in a world where it loses control.**

More broadly, Black reported significant achievements to date, with distribution input falling 10% since 2000 against a background of population growth. He said this is partly related to successful leakage management.

Going forward, the affordability of further measures will be an issue, particularly as the level of efficiency savings available is falling over time. Aside from the greater role for markets already discussed (Baggs suggested in addition that tradable leakage targets would be worth consideration, so a company could, for instance, pay another water company to go beyond its SELL if that was cheaper than reducing leakage in its own patch), PR19 will incorporate some features that were not in play at PR14. Ofwat's resilience duty had not been clearly scoped out at in 2014; at PR19 this will be relevant to Ofwat's approach to water resources and water efficiency. Moreover the approach to Performance Commitments (PCs) and Outcome Delivery Incentives (ODIs) will be developed; this month, the regulator will publish a consultation on outcomes which will include consideration of whether leakage ODIs should be common or company specific. Baggs commented that how ODIs are formed for PR19 will be a live issue for the industry, particularly if there is a move to dynamic measures and league table-type comparisons between companies given variations in leakage measurement methods.

> **There has got to be a customer access point to the wholesaler**

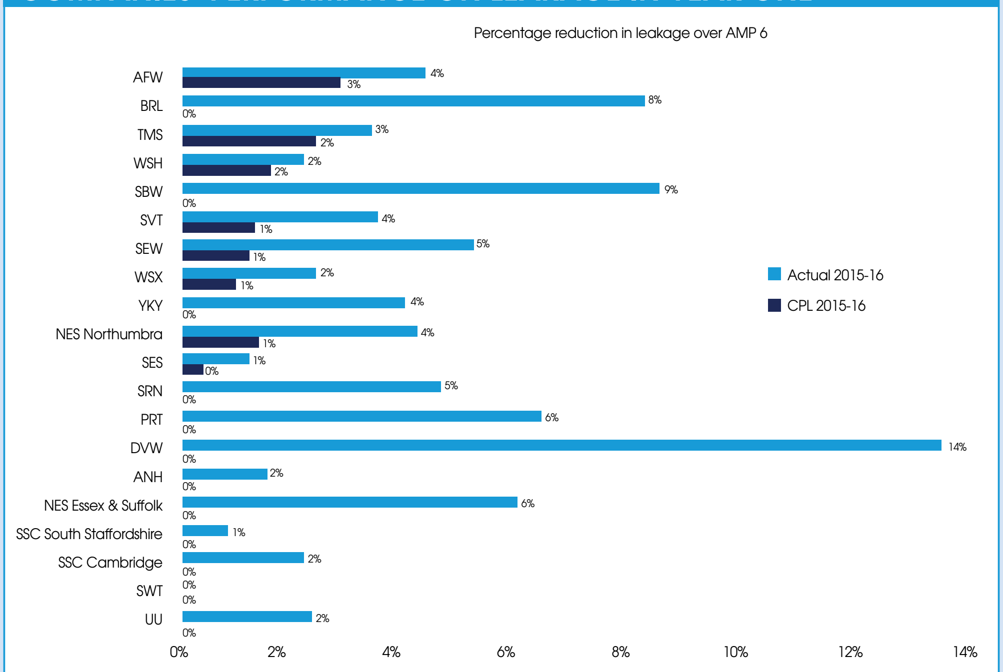
Early evidence suggests the ODIs put in place at PR14 are working effectively. Northumbrian's Dellow said incentives have a "major impact" on innovation, reporting that historic trends reflect this: companies had a big push on leaks when regulatory targets were first set, but "took their foot off the pedal" once the ELL had been reached. Consequently leak rates plateaued. The new PR14 incentives should get things moving again, though Dellow commented that the patchwork of approaches to leakage PCs and ODIs that resulted from a lack of guidance from Ofwat was a "missed opportunity" to drive improvements across the board.

South East Water has done some interesting analysis of leakage ODIs and their impact on leakage management and innovation, as set out in the box on p28.

However, many felt regulatory levers could be better. For one thing, they are too short term, particularly in contrast with the approach taken in countries and regions including China and the Middle East, both of which are pursuing ambitious leakage reduction programmes. China for instance is looking for network-wide visibility and pursuing single figure leakage. Dellow said he saw little evidence of English and Welsh companies planning beyond the five year cycle horizon. "No company currently has a mains replacement programme," he observed. He suggested companies should develop a longer term cost benefit analysis and collectively go to Ofwat and say there is a need to look beyond the five year planning horizon.

The chair of innovation at the Future Water Association Alastair Moseley added that PR19 should recognise the value of trying things and reduce the culture of a fear of failure.

COMPANIES' PERFORMANCE ON LEAKAGE IN YEAR ONE



Company initiatives

There was consensus at the conference that no company was complacent on leakage. Baggs said its ability to hit the headlines put it "right at the top of all operational measures" at board meetings. A number of suggestions came up throughout the day of ways in which companies themselves could change to manage leakage down.

Supply chain relationships – Companies could be more open to working with SMEs and technical specialists. Glyn Addicott, operations director of supply chain firm Hydraulic Analysis, drew a stark comparison between his company's work the Middle East, where there is an appetite to work with innovative SMEs, and the UK, where it can be very difficult to get to work with water companies. The Future Water Association's Moseley added there was too little 'pull' from the industry to work with SME innovators, but that such businesses can find it hard to get sufficient investment to 'push' into the market.

Collaboration – Dellow said leakage teams were for the most part good at sharing learnings company to company, but could do more to look at experiences beyond water – to gas, for instance. Moseley added that the procurement process could at times act as a barrier to collaboration between companies as each is keen to secure the best deal for itself.

Data – As data quality improves – be it through technology/system advancements, market reform or another route – companies will have more to go on in the battle to reduce leaks. Andrew Oakes, supply demand planning lead for AMP6 at Thames Water, detailed how the company's universal smart metering programme is yielding much more granular data. He explained Thames is still exploring how best to use the information being relayed, but that the data is already changing the mindsets of staff on the ground – for example, from thinking 'a leak might be present' to thinking 'where is the source of the continuous flow?'; and to entertain the possibility of the existence of a second leak and hence the need for a second repair visit.

The industry is not sitting on its hands as it stands though. Dellow provided information on current and future UKWIR projects, including a strategic initiative on achieving zero leakage by 2050. TWR

ONLY 8% OF BUSINESSES KNOW OF MARKET OPENING

CC Water study exposes low awareness levels

Fewer than one in ten businesses in England are aware that they will soon be able to switch water supplier according to findings from the Consumer Council for Water's latest research among business customers.

The study, *Testing the Waters*, showed that while 60% of businesses polled were in favour of having the option to switch water supplier, only 8% were aware, without prompting, that the water retail market was scheduled to open to businesses next spring – up just 2% from 2014 . On prompting, 13% demonstrated awareness in the latest poll. Fewer than one in eight respondents felt that competition would be a bad development.

Awareness was particularly low among small businesses and CC Water voiced concern that those consumers could lose out unless all parties up their efforts to provide more information.

The report included indicators of what will be required to gain new business (see table, top).However, the study found that half of respondents did not know how much their company water bill was – although some respondents were not responsible for management of bills.

CC Water found that 38% of business customers said they would be likely to switch retailer once they had a choice but would need to see a cut in their bills of at least 17% on average. And 75% of businesses quizzed said they would seek a better deal with their existing supplier once the option to switch was in place.

CC Water chief executive Tony Smith pledged his organisation "would be doing all we can" to ensure all business users were alert.

CC Water polled 4,000 business customers for this latest study and for the first time it extended its survey to include firms with more than 250 employees.

Satisfaction

The survey revealed that winning over customers in a competitive business retail market could be challenging. Satisfaction with water and sewerage services is high across the industry. In overall terms, 92% were net satisfied with their water services and 74% were net satisfied with sewerage services. The net satisfaction score for surface water drainage was lower at 63%. There were regional differences, with CC Water pointing out: "Notably, businesses in Wales are significantly more likely to be satisfied with all aspects of their water supply service than those in England."

Trust was good and improving. The study revealed a significant increase in customers' trust in their water companies to 7.6 out of ten in 2016 from 7.3 in 2014. Businesses also trust their water company more than their main energy suppliers, who averaged 6.8.

Overall scores for value for money have dropped since the previous survey. Competitive opportunities show themselves also in advice and support where satisfaction is lower. TWR

HOW READY AND SATISFIED ARE LARGE USERS?

Industrial and commercial customer organisation the Major Energy Users' Council polled its members at a meeting in Leeds last month on their water retail market strategies and readiness. The results showed:

- 56% have a clear course of action on the new water market planned; the remainder don't.
- 11% have a clear view on which supplier(s) they favour; 30% have a view but say this needs further consideration; 54% don't have a view yet on a favoured supplier(s) but plan to engage with the market; 4% don't plan to engage.
- 19% are satisfied overall with the arrangements put in place for the new market; 57% are neither satisfied nor dissatisfied; 17% are dissatisfied; the remainder don't know.

AVERAGE DESIRED SAVING TO SWITCH, BY BUSINESS SIZE

	Micro 0-9 employees	Small 10-49 employees	Medium A 50-99 employees	Medium B 100-249 employees	Large 250+ employees
Would switch for 1-10%	10%	18%	24%	20%	23%
Would switch for 10-20%	25%	32%	33%	38%	34%
Would switch for 20-50%	22%	18%	18%	14%	15%
Would switch for more than 50%	8%	5%	4%	3%	4%
I would not switch	26%	16%	14%	18%	14%
I would not switch, only for service	9%	11%	7%	8%	9%

AWARENESS OF MARKET REFORM, BY BUSINESS SIZE

	Unprompted (2014)	Unprompted (2016)	Prompted (2014)	Prompted (2016)
Micro 0-9 employees	2%	5% (11% sole traders)	6%	9% (17% sole traders)
Small 10-49 employees	2%	7%	4%	13%
Medium A 50-99 employees	3%	8%	5%	13%
Medium B 100- 249 employees	5%	13%	9%	20%
Large 250+ employees	N/A	41%	N/A	49%

CC Water