HOUSE OF LORDS

# Industry and Regulators Committee

## Corrected oral evidence: Regulators and growth

Tuesday 13 January 2026

10 am

Watch the meeting

Members present: Baroness Drake (The Chair); Lord Best; Lord Gilbert of Panteg; Baroness Harding of Winscombe; Lord Teverson; Viscount Thurso; Viscount Trenchard; Lord Udny-Lister; Baroness Valentine.

In the absence of Baroness Taylor of Bolton, Baroness Drake was called to the Chair.

Evidence Session No. 7 Heard in Public Questions 81 - 91

### Witnesses

I: Annie Conde, Chief of Staff, Hoxton Farms; Mark Thurston, CEO, Anglian Water.

# Examination of witnesses

Annie Conde and Mark Thurston.

Q81 **The Chair:** Good morning. I welcome everyone to this evidence session of the Industry and Regulators Committee on regulators and growth. The meeting is being broadcast live via the parliamentary website and a transcript of the meeting will be taken and published on the committee website. You will have the opportunity to make corrections to that transcript where necessary.

Today, the committee is hearing from Annie Conde, chief of staff at Hoxton Farms, and Mark Thurston, CEO of Anglian Water. Welcome to you both. Thank you very much for coming. You are probably alert to the fact that we have a lot of questions we would like to ask you, but maybe I could open with a more gentle question and build from there. Could I ask you each in turn to give us a brief introduction to your business and the key regulators you work with and how you would describe your relationship with your regulators?

***Annie Conde:*** Thank you very much for the invitation. Hoxton Farms is first and foremost an advanced bio-manufacturing company. Food is our first commercial market, but essentially we are building scalable infrastructure to grow cells industrially. In a nutshell, we grow real animal fat without the animals. The idea is we can enable people to have their pig and eat it, too. We are focusing on fat because fat is what makes food delicious. It is what makes meat sizzle and brown, what gives aroma and flavour, and what transforms texture in cooking.

This is vanguard UK science, developed here in London. It is rooted in cell biology and the process is very similar to that which you would use, for example, to brew beer. We start with a small sample of cells from a pig, taken harmlessly, and then we grow them in cultivators, similar to the tanks that you might have seen in a brewery if you have ever visited one. After a couple of weeks, we harvest fat that is indistinguishable from the product that you would find at a butcher. We then sell that fat business-to-business as an ingredient to food manufacturers to make food products that are healthy, delicious and scalable. If scaled, this could become a multibillion-pound UK company. Overall, it is estimated that approximately £2.1 billion could be added to the UK economy by 2030 with this industry alone.

Cultivated food and bio-manufacturing support a range of UK goals, not only the potential to have net-zero food and agriculture—having another option for meat eaters and flexitarians—but they support UK food security with domestic manufacturing. They create high-value manufacturing jobs and preserve additional consumer choice. However, none of this would be possible without credible and trusted regulation. This is a very new product and new industry overall, and we have the chance to combine world-leading safety with world-leading regulation here.

The main regulator that we interact with is the Food Standards Agency. We are considered a novel food product for our first product, so we must undergo the novel foods process. So far, our relationship with it has been constructive and collaborative, especially as we have taken part in a cultivated product sandbox, which was launched earlier this year, which I would be happy to talk more about. We are still early in that process. We have submitted regulatory dossiers in the US and Singapore and are finalising our dossier here for submission in the UK. We also interact with some other agencies, specifically the Environment Agency and Defra, as part of facility inspections and certifications and for import and export.

Overall, we are a ground-breaking UK company still early in our regulatory journey, but we know that regulation is essential to grow where we are, to build consumer safety and definitely to develop our product and bring it to the UK market.

***Mark Thurston:*** Good morning. I am chief executive at Anglian Water. It is a job I have had now for 18 months. Anglian Water is the biggest water company in the country by area. We cover all the east of England, north of the Thames at the southern end, right down the eastern coastline, up to the South Humber Bank. We come across as far as places such as Milton Keynes and Bedford. We have about 7 million customers all in across that part of the country. It is about 2.5 million households. We put into supply about 1.2 billion litres of fresh water every day to that part of the country. Because of the geography, clearly, we have one of the biggest infrastructure bases of what we call the WASC (water and sewage company). We are a water and sewerage company, so we provide clean water and we have a wastewater infrastructure system as well.

There are a couple of characteristics around Anglian that are relevant to our relationship with our regulators. We are the driest part of the country. We serve a huge amount of demand for water in our part of the country for agriculture. It is often referred to as the country’s breadbasket. We are also seeing, certainly in the last few years—there has been a bit of a history here, but certainly more acute in the last few years—a huge amount of growth in the east of England, with four of the five fastest-growing towns or cities in the UK, which, of course, include Cambridge, which has its own water company but we deal with all the waste.

We have three statutory regulators in water. The Environment Agency, as an arm’s-length body of Defra, is responsible for environmental regulation. We have the Drinking Water Inspectorate, which is really a quality inspector and regulator for drinking water quality. Marcus Rink leads that organisation. Then we have an economic regulator, Ofwat. So we have three regulators we have to deal with. Pleasingly, this Government are committed to reforming the sector and moving regulation under the banner of one integrated regulator, because although we have, I think, a pretty productive relationship with all three, it is hugely time-consuming; it is hugely costly. The timings of how they work together are not always as synchronised as they could be. Ofwat is very much a national regulator. It runs a national model for economic regulation, so we have a relationship with it in the centre. It has offices in both Canary Wharf and Birmingham. We have an HQ relationship with both the Environment Agency and the Drinking Water Inspectorate, but they also have regional teams that work with us in our geography.

I think that I will pause there, Chair, and see where that takes you in terms of questions.

**The Chair:** That takes us, I think, into the impact of regulation. Viscount Thurso has a question.

Q82 **Viscount Thurso:** Good morning to you both. I will come to Annie Conde first, not least because as a former hotelier and caterer I am fascinated by what you do. I cannot ask a single question about that because it is not germane to this inquiry, but the question I have is: what do you see as the impact of regulation on your business? You have already said it would be impossible to do your business without it. What is a burden and what is a benefit to you?

***Annie Conde:*** Thank you for that question. Here we are talking about food. This is something that everyone has a very deep and personal relationship with. We all eat three times a day and we want to make sure that the food that we are putting in our bodies is safe, nutritious and healthy. That is something that is very important to us to build with consumers.

The key benefit that the Food Standards Agency gives us is ensuring that we are building that consumer trust. It allows us to have a stamp of approval to show consumers that this very innovative product that has not been marketed before is safe and nutritious and has been held to very high, rigorous standards in terms of the testing that has had to happen and the process to produce it, knowing that it is safe, knowing that the conditions in which the product is grown are maintained over time as well. That is the main benefit of having a regulator in our space. It means that we can be confident with its expertise that we are making the best product possible in a safe way and to build that consumer trust for something that is truly innovative and has not been on the market before.

There are, however, drawbacks, as you are saying, and impact. The biggest impact of regulation is the opportunity cost. The novel foods process in the UK was inherited post Brexit and it was, frankly, not fit for purpose. Cell-cultivated products are very different from most novel food products that are currently seeking approval. In fact, there are only two novel food product applications for cell-cultivated products active in the UK right now. We hope to be the third very soon. But there is currently a huge backlog of applications for the Food Standards Agency. As of 2024, there were more than 400 applications that were still waiting for regulatory approval, and the time to approval is generally over 30 months. The process is supposed to be a little bit quicker and go to 18 months, but that time is time that for a start-up like us—which is venture backed; we are looking for financing from investors and basically are not able to sell commercially and have revenue until we go to market, which means we have to wait for that regulatory approval—the longer that timeline is, the longer we are delayed in getting to market, the longer we are delayed in making this a scalable business.

As an example, Singapore and the US developed these processes for cell-cultivated products sooner and developed processes that were faster. The average approval time in those markets is about 12 months, which is a significant acceleration versus what we have here in the UK. That is one of the reasons why we chose to submit our dossier in multiple markets at the same time and why we expect, despite being a London-based company, that we will first go to market in probably Singapore or the US, followed by here in the UK. That is the biggest impact, I would say—the long time that we have to wait to go to market.

The other big impact is the robustness of data in the dossier that the Food Standards Agency requires. I think that we should hold ourselves to the highest standard of regulation, to the highest standard of safety, but being aware of risk I think is different from being risk-averse. I think we have to create smart regulation that is tailored to these products, and the cell-cultivated product sandbox has certainly been a very good step in that direction, trying to accelerate timelines, give more clarity for cell-cultivated products, and so on. For example, the UK requires five repeat entire production lines of our process versus the US and Singapore requiring only three. That meant that we had to do additional work and conduct additional testing and analytics for the Food Standards Agency, which delayed our submission versus some of these other countries.

I would say there is an opportunity cost there, because all the time that we are spending on that dossier is time that we are not spending with consumers building trust, with customers building our potential pipeline for people to sell to, and on R&D to improve this product and grow the business as well. There is a big opportunity here to improve that, and I think that the Food Standards Agency has made some big strides in heading that way.

**Viscount Thurso:** Presumably, very quickly, the impact of that is your cash runway needs to be substantially longer.

***Annie Conde:*** Yes, our cash runway needs to be longer. It also makes the business a lot less investible, so investors are much more risk-averse. We need to raise cash for three-year timelines as opposed to an unregulated business that might need to raise for one year, which makes it much more difficult.

**Viscount Thurso:** Mark, I come to you with the same question. Basically, what do you see as the impact of regulation? What are the benefits? What are the burdens? You have touched on the fact that you have three regulators, but please expand a bit.

***Mark Thurston:*** Thank you. There is no doubt that as a monopoly supplier of water and wastewater services we need some form of regulation to protect customers and the value that customers pay to protect the environment. It would be unfair to point the finger of the problem and the burden at one regulator, but it is the system. That system has evolved over years so there are layers and layers of bureaucracy enshrined in each of those regulators. The economic regulator works to five-yearly cycles, the other two do not. We will go through a business planning cycle every five years to agree how much money we can charge customers for investment in our asset base.

There is no doubt that over time it has become clear through the reform that there has been very little government strategic policy direction into the water sector, so the economic regulator has de facto become the policymaker for water. The only policy you could really point to over the last 20-plus years is about keeping customer bills low. We have had a fundamental lack of investment in water infrastructure since the early days of privatisation.

To give an example, we have just had some consultations come to us from the Environment Agency for more stringent environmental compliance, which could put something in the order of £500 million into our business in this five-year period—we started that five-year period in April last year—and that is outwith the five-year planning process and economic process we have been through with Ofwat. Last year alone I think that we generated, between all three regulators, some 30 reports just on storm overflows.

I have teams facing off to all three regulators. We end up being the glue that binds together all the things that they require. We get one bite at how much we can charge customers for that over time. Frankly, the reforms that government has committed to—a guy called Sir Jon Cunliffe did a review of the water sector last year, reported in the middle of the year, and made the observation that regulation has, over time, failed customers and the environment and the water companies are stuck at the other end of this process. The sooner we can move to a single integrated regulator where we can decide what the priorities are for water infrastructure in any one geography, how that serves customers and the environment, and how that is value for money for customers cannot, frankly, come quickly enough. Realistically, I think that is likely to come in the next five-yearly cycle, which starts in 2030. We have to find a way of managing that transition between then and now.

**The Chair:** Thank you. Lord Udny-Lister has a couple of questions.

Q83 **Lord Udny-Lister:** I want to follow up on Mark’s answer to that last question. What I am interested in is the spectrum between seeking regulatory predictability and stability so that you can make long-term plans and investment and then the regulatory flexibility for new opportunities. Where do you sit on those two things? While you are answering that, what do you need from the regulator to be able to innovate and grow?

***Mark Thurston:*** Thank you, Lord Udny-Lister. I think that the reality is we need both. The long-term stability around a regulatory environment is crucial for investment. We are one of a number of privately owned water companies with infrastructure investors who are global investors. Those investors have choice about where they invest that capital anywhere around the world. They need, not unreasonably, a level of predictability about the return on that investment and that long-term play that is at the heart of your question. That predictability will be crucial for them going through into this transition to a new single regulator. They have been very patient. Many of our investors have been with us many years. There are other examples of other water companies around the country in a similar vein. In light of my comments on the previous question around the lack of investment over 20 or 25 years, I think that what we are all staring at as a country and as consumers is a kick-up in investment over the next 20 to 25 years to some extent to compensate for the underinvestment that we have seen for a generation. We will need these investors to stay patient and they will need the predictability and the stability of our regulatory environment so that they can continue to invest because they do have choice.

At the same time we do need flexibility. This Government’s appetite and drive for growth have really emerged since we did our business plan for this five-year cycle. The regulatory environment currently does not lend itself to change. It is very much quite a static model that I would suggest is comfortable with a pretty steady-state business as usual environment. Just in our patch alone, we have two great examples. One is Universal Studios, which wants to build a theme park near Bedford. The water and wastewater requirements for that go outside of any normal requirement and the charging rules in themselves do not happily lend themselves with Ofwat to how we would then charge a private enterprise of that scale for its water and wastewater services.

Another example is that last week I was in Grimsby. We have a huge appetite for water on the South Humber Bank. There is a big industrial quarter there on the back of engineering and processing. They do not actually need potable water; they need non-potable water for industrial purposes. Again, the regulatory system does not lend itself for us to be able to adapt to serve those customers. I think that we need a combination of long-term stability and predictability for investment but with sufficient flex in the system so that we can deal with these emerging demands.

**Lord Udny-Lister:** Thank you. Could I go to Annie for her comment?

***Annie Conde:*** I think that you will hear my answer being quite similar to Mark’s. We need regulation to be both predictable and flexible. If I was made to choose between the two, I would say predictability is most important. Like Mark, we are embarking on a long journey to approval, but also to build the infrastructure for the cell bio-manufacturing that we are going to be doing. In the first instance, we are building a site that will be in the millions to tens of millions of pounds somewhere in London, but then we will be looking at building sites that are in the hundreds of millions of pounds. We need to have the predictability on timelines, on the fact that regulation will not change, and on the fact that our product will continue to be vetted by the Food Standards Agency and Defra as we continue to grow.

Predictability is quite important because we are thinking about long-scale processes and manufacturing facilities that we are going to build here in the UK, so consistency matters. We are talking here about a first facility being built later this year and then into 2027 and much larger facilities 2027 to 2028 and onwards. Having that long-term clarity and predictability is essential for us to be able to gain financing but also even to design these facilities. For example, if we had to change our process significantly because there was a change in the Food Standards Agency guidance for cell-cultivated process, it may require an entire redesign of our facility. Having that clarity and predictability early on is very important.

That said, flexibility is also extremely important. I think that the Food Standards Agency is starting to work towards this with the sandbox and some specific guidance for cell-cultivated products, but at the same time there is more that can be done. There are still a lot of grey areas for our product. Like many research and development organisations, our process is not static. We continue to make improvements to our manufacturing process. For example, we might make it more cost efficient. We might make it even more sustainable. We might be able to make the cells, for example, healthier. This is something that we have been exploring, to make our fat more nutritious; for example, by increasing the omega 3 fatty acids or by doing things like reducing the saturated fat to make it more nutritious, which food manufacturers are very interested in and it could help overall health. However, in order to do that we need to make small tweaks to our manufacturing process. If the Food Standards Agency approval is so rigid that we cannot make even small changes such as changing a supplier, let alone changing parts of our process, that would mean we would have to resubmit for approval every time we have a slightly new process, which would once again start another 18-month—I hope—to maybe 30-month timeline for approval.

One really good example where this has been done well is in the Food and Drug Administration in the US. It has a process for what it calls major versus minor changes. Major changes do require a bigger submission and more data packages because they present some additional risk. They are a fundamental change in the process of manufacturing that has been approved. However, minor changes—for example, changing from one supplier to another with some documentation that the input that you are using is very similar—do not require a full submission, just a demonstration of equivalence. That would be a really good way to show some flexibility in the process and ensure that we can continue to do research and development and continue to improve our process to make fat that is even more affordable, even more delicious and nutritious for consumers, but still maintaining safety for consumers.

Q84 **Lord Udny-Lister:** I will just follow this through a little bit further. There is obviously a tension between prescriptive regulation with very clear written down rules and guidance and a principles-based regulation where outcomes are much clearer and therefore you have more flexibility if you have that regulation. How do you define the regulations that you work with? Are they all prescriptive or do you have any outcomes-based regulations that you deal with?

***Annie Conde:*** The Food Standards Agency novel foods process is mainly principles-based regulation. There are broad requirements; for example, demonstrating that it does not present a risk to public health and it should not mislead consumers. Generally, it is quite broad ranging in terms of what it requires. There is some guidance available, and this is improving now with the cell-cultivated sandbox, as I have mentioned. This is important because the range of products that are being submitted for novel foods approvals are so broad. When you think about novel foods, it is any food that was not consumed broadly before 1997, so the range of foods that are going through this process is enormous. You have, for example, CBD products, over 11,000 of them, some of which are going through this novel foods process. You have cell-cultivated products, and then you might even have, for example, some mycelium or fungi that were not consumed broadly before and have to go through that process.

The same prescriptive outcomes do not work for each one of these foods, each one of these products, so you need that principles-based approach in order to give flexibility. We think that the current Food Standards Agency approach is more principles based and encourages a little bit of that innovation as well, which I know is part of the remit of this committee, to encourage innovation and growth within the UK.

On the flip side, there is a lot of uncertainty. This comes from two different places. First, as I mentioned, there have not been a lot of Food Standards Agency submissions for novel foods historically, so there is not a pattern for us to follow. There is not a submission that we can look at and see what the regulators have required in the past. It is up to the regulator how it will interpret the evidence that we submit. This happened very recently with our current submission. We had prepared a series of data that we thought was sufficient for the UK and then the Food Standards Agency came back and requested some additional analyses that were specific to novel foods and cell-cultivated products, but because the guidance is principles based that was not set out initially. This is being resolved somewhat with the sandbox. Now the Food Standards Agency has published guidance, for example, on allergens and allergens that we need to test against. That is not a formal part of the Food Standards Agency novel foods framework but rather guidance for cell-cultivated products specifically. But that kind of guidance will be invaluable for the companies and products that come after us to give a little bit more predictability, to give clarity.

The other thing that the Food Standards Agency has done here is it that has started a pre-submission consultation process, after feedback from a lot of the companies in this space, that allows us to speak to it ahead of a submission. Many of these tests and much of this process are developed over years of research and development. As a company, we have been operating for five years. It is about four and a half years of research and development that has gone into submitting this process. Being able to speak to regulators early on to inform the research and development that we will do to make sure that our process meets the guidelines and standards that it wants to set is invaluable, and I think that will be very valuable also for companies moving forward.

**Lord Udny-Lister:** Thank you. Mark, can you comment?

***Mark Thurston:*** Yes. We have at the moment a series of output performance measures as a water company, but we do not have an outcome-based regime and it is very input specified. All three regulators are quite prescriptive. There are a lot of layers of requirements and, as I said earlier on, they have developed over time. If you just stand back and look at all the prescription and the requirements that are set by regulators, it is very onerous to manage all those. Certainly, Sir Jon Cunliffe's review identified this and made the point that we should move to more of an outcome-based approach for water.

There is a backdrop to water, of course, where, as we have read, when it comes to trust between consumers, water companies and regulators, as I think the Secretary of State said, it has failed consumers. We recognise that there is a need to rebuild trust between water companies and consumers, and arguably in a new model the greater performance and the greater delivery from each water company would earn you more autonomy. I think that you could see a scale where you have performance issues and it would not be unreasonable that a single regulator's oversight, supervision and prescription would be greater. But I think we need to move to a model where it is more regionally focused and germane to the particular geography. The reality of whether it is climate, the geology, your customer base, the nature of your infrastructure, all these things are very different in each part of the country, yet we have one econometric model for water economics, which, frankly, then does not serve anyone particularly well.

There is a term that has been introduced by Cunliffe for a new regulator around constrained discretion—this idea that regulators can exercise some judgment, working with the regional water company to decide what needs to be done that serves the needs of that particular region. There is a model similar to that in Scotland, actually.

The other backdrop to your question is that for this to all be successful government needs to set in its strategic policy statements those things it cares about—so what are the things we want as a national policy when it comes to water?—and then give some discretion for the regulator to work with water companies in any particular geography to drive the outcomes that serve customers and serve the environment. I think we can see a way to a different place from today's but I would say, 18 months in, that the current model is not sustainable and it is not great value for customers at all.

**The Chair:** If we could move on to new products and services, Lord Best, you had a question.

Q85 **Lord Best:** This is about how risk-averse the regulators are. Would you like to see them taking a more robust approach to new products, new services, new ideas, even if that does increase the risk to either consumers or the environment? Perhaps I could go to you, Annie. Is the difference in Singapore and the US that they take a rather more open approach to the way that they regulate? Is that a big factor in the difference that you have detected?

***Annie Conde:*** I think so. Especially in food, Singapore is a great example. They obviously have a lot of domestic manufacture and domestic food supply issues so they decided that they wanted to be a leader and an innovator in food and as part of that four years ago they started developing these guidelines for cultivated products and started working directly with industry. They have done this also in several industries but food is one that is very important to them. I think they have shown that openness to innovation and that idea of tailoring regulation to new and innovative products.

As you say, there is a chance that there is going to be higher risk when you are working on something innovative but we think that there is a way we can allow promising innovation to proceed without increasing risk majorly and knowing that any risks are understood and mitigated, that we know what the risks are going into a process, especially when we are innovating here. There is always some level of uncertainty when you are bringing a novel technology to market and to consumers, and that is the important role that regulators must play.

Again, I would phrase this as having regulators be risk-aware rather than risk-averse so we would like them to be more open to innovation and we think that if regulators have this mandate for growth, have this mandate for innovation as they did in Singapore, then they would be more willing to take some of those risks, to work with industry more, to perform regulation. Right now a lot of regulators are not incentivised by bringing innovation. Rather, they are penalised if there is a risk that they experience or a risk that goes through their regulator. Having that mandate as a guiding mandate for a regulator would be transformative.

I keep mentioning this, but the cell-cultivated product sandbox has been a really good example of this more innovation-open stance. I am happy to speak about it more if someone has some questions about it but it basically allowed us to work with the Food Standards Agency on innovative products that it did not have the expertise in but it was bringing that expertise into the Food Standards Agency. No one there had worked on cell-cultivated products so very few people were aware of them, but with this £1.6 million investment from the Department for Science, Innovation and Technology they were able to create a sandbox, bring eight companies from around the world, position the UK now as a leader in this space with many companies planning to bring their products here to the UK and go through the UK Food Standards Agency approval process, and also understand how we can manage risk, share responsibility and work on innovating regulation.

This is one of the opportunities I would say post Brexit that we have seen. The regulation in Europe and with the European Food Safety Authority means that the process there is even longer so even though it should be very similar to the one in the UK it ends up taking four to five years to get approval there just because of the backlog that they have and some of the additional issues that they have with regulators there, which I am happy to go into. It means that the UK has a chance to position itself as a real leader in food innovation and the sandbox has been a great first step to get regulators to be more open to innovation and less risk-averse.

**Lord Best:** I do not know to what extent new products is a part of the Anglian philosophy for the future.

***Mark Thurston:*** I think some of the same principles apply that Annie shared with you, Lord Best, such as this idea that regulators have a mandate, so government comes out and says what from a policy perspective is important for the sector. There is a lot of work, as I have mentioned already, that we could be doing with the regulator to understand our business and our region better, where we could drive greater application of effluent reuse; in effect, moving effluent and cleaning it to become non-potable, which has huge industrial benefits. The idea that we are putting a food-grade product, clean water, that we would drink and put in our tea as a life-giving product, as Annie has talked about, and use that same product to jetwash your patio and cool data centres and use it for steam for processing for industry—there is a huge opportunity to look at how we scale up non-potable water because it is increasingly a scarce resource.

Sustainable aviation fuel is an area of activity. Ofwat does have an innovation model and it is quite successful. It is nationally led and I think taking that into a more regionally based approach, where we could work with a more regional or combined regulator and we could decide and work with it about where is the opportunity to innovate, would be good.

To my earlier point around growth, when I think about some of the growth challenges we have, again, I think there are opportunities for innovation to make sure that we can facilitate growth in the region because we have a huge demand for water and wastewater services and we find ourselves struggling to support some of that growth because, frankly, there is a political choice between wanting to build more houses and wanting more commercial development but it generates more waste and more waste puts more pressure into our wastewater system, which then creates greater pollution risk, and we know that has become quite a political issue for reasons that this committee will understand.

I think there are some real choices in here. I subscribe to Annie's point that there needs to be a mandate given to an integrated water regulator about what the country cares about and then have that regulator work with water companies in any particular geography to decide what is best to invest customer money in to innovate for the long-term benefit of the environment and the customers in that part of the country.

**Lord Best:** Can this intent be translated into practical action by the politicians being more specific in the amount of failure they will tolerate?

***Mark Thurston:*** I come back to the point Annie made. If a regulator has a mandate—so, for example, if we want to use bioresources to create a product that we can use to convert into sustainable aviation fuel, if we want to move to a system where we use only non-potable water for commercial and industrial purposes rather than potable water—if that is part of the policy then I think that burden should shift then to the regulator and the water company to work out how to do it. We need government to set out the what and the why and then put the responsibility for the how and when on to water companies working with their regulator, where we maintain guardrails, because regulators have a role to play, but the regulator has some protection, politically or otherwise, about those things that we care about as a country.

**Lord Best:** Annie, should the politicians be more specific in what they mean by giving you more room for innovation?

***Annie Conde:*** Specificity is always helpful, especially for regulators and for innovators as well in terms of driving growth. There are a number of practical things that could be done in this space. One example that comes to mind—and this has been done in a lot of other geographies, but building off what Mark has said—is more sandbox-style programmes, funding that sandbox further, because it is only a two-year programme, for example, and creating that kind of environment within the entire Food Standards Agency. This is a small sub-team that we are speaking of but that approach does not exist for anything beyond cell-cultivated products.

There are a lot of other novel foods, such as precision fermented foods, that are being developed right now here in the UK that do not have the benefit of these innovation groups, and also these innovation groups tend to be quite short-lived. Making sure that some of the learnings from that go back into the broader agency are quite important.

There are other practical things that you could do. For example, in Hong Kong the regulator recognises approvals from Singapore. That reduces administrative burden quite easily and quickly. They have worked together so that if you submit in one country you can submit a very similar dossier in the other, and with some consultation—sometimes it requires some additional work—they have a much more streamlined process. You could do the same in other jurisdictions; for example, aligning UK regulation more with other international regulators. That would be a key practical step that you could give regulators. But I agree with Mark also on having some of those guardrails and having a mandate for innovation is not at odds with the regulators' role. Right now, they are incentivised to be very risk-averse and they do need that mindset shift and key performance indicators given to them as specifically as possible to accept a little more risk. There is no incentive to them right now to accept risk. Consumer health and well-being is number one for many of them, and it should continue to be, but there are ways to do that while accepting a little more risk.

**The Chair:** If we can move on to the Government's action plan, Viscount Trenchard, you had a question.

Q86 **Viscount Trenchard:** Good morning. I would like to ask you what you both think about the Government's action plan on regulation, which was published in March last year, and the progress update, which was published in October. Under the action plan, as you know, there is a renewed focus on the regulator's duty to achieve growth, in some cases general and in other cases through specific secondary objectives and the like. What do you think about the action plan and to what extent have your regulators made changes in response to it? If so, what are the key changes? Would you like to go first, Annie?

***Annie Conde:*** Yes, of course. Thank you so much for the question. The regulation action plan was certainly something that we welcomed and we thought could be transformative in an industry such as ours. The high-level message was of supporting UK economic growth, funding innovation and being more efficient—all things that we have been calling for for a long time—so it was excellent to hear that that is the direction that regulators are being incentivised to move into.

I will speak about this now in a little bit more depth. We are already starting to see responses from our primary regulator, the Food Standards Agency, so I think the mandate has already started to percolate through that agency. It is still moving slowly, as regulatory change often does, but we are starting to see some of those changes. First and foremost, of course, is this sandbox. To speak a little bit more about the cell-cultivated product sandbox, it is a £1.6 million programme funded by the Department for Science, Innovation and Technology to engage with cell-cultivated product companies that want to submit dossiers in the UK for cell-cultivated products. That has done many things already.

For example, there was no framework in the UK for allowing public tastings. We could do tastings internally for research and development purposes but we could not do any public tastings. It is very difficult to convince consumers and get consumer feedback if you cannot give them your product. So they have started to develop guidance for how we can do tastings, and we expect we will be the first company to do a publicly sanctioned tasting here in the UK. That is something that has been transformative for us. At the end of the day when you are a food company you want to be able to feed people and show them something delicious.

Another change being proposed is that right now the novel foods process requires ministerial approval. After about an 18-month evaluation process, that dossier goes to Ministers for them to approve the decision of whether to introduce a novel food product or not. That often introduces delays of six or 12 months or more. Instead of doing that, they are considering a public registry of products, which of course would accelerate the time to market and mean that we can bring products to consumers much more quickly. That would also be transformative for us.

I have mentioned already the pre-submission process that the Food Standards Agency has started to develop. Once again, this is only for cell-cultivated products, which I think will be very useful, but I think should be expanded to other novel foods products as well.

Those are some of the changes that we have seen already that I think demonstrate that the Food Standards Agency is trying to work with industry and foster growth in this area, but to continue to do that one of the key challenges it faces is resourcing. The Food Standards Agency has been very underfunded for years. It has struggled with resources, and it is now getting applications for products that it does not necessarily have the expertise for, so it is building that expertise and having to hire and bring in people who have that expertise.

For example, in the United States with the Food and Drug Administration, because it works across both food and pharmaceuticals and the process that we use is very similar to that of pharmaceuticals, much of that expertise existed already in the agency. That is not the case in the UK, where the Food Standards Agency focuses only on food. It needs more resourcing. A £1.6 million sandbox programme for two years is excellent and a great step forward but longer term if its mandate for innovation and for new products and driving growth is to be sustainable, it will definitely need more resourcing to support that.

**Viscount Trenchard:** Thank you. What is your opinion, Mark?

***Mark Thurston:*** Coming back to what I have said already, the growth mandate is another thing that the regulators in water have to accommodate among their existing duties. I think it is important at some point that the Government come out and give the water regulators in their current form, where we have three, some clear direction about what is important. Much of the growth we are seeing in our region is housing growth, and depending on what source you use there is anything between 60,000 and 75,000 new homes to be built in the east of England between now and 2030. None of that was in our thinking as Anglian Water when we put our business plan together for this five-year cycle. There is a political choice, frankly, to manage growth and environmental compliance and I have made this point to the Minister. I think regulators do need some clear direction.

We are seeing in light of the pressure from around Cambridge, the pressure around Universal, the regulators being more receptive to the need to help facilitate our requirements for growth because it requires an investment in infrastructure and potentially some flexibility around environmental compliance. I think we are seeing some movement and let us hope that that continues through this five-yearly cycle, but fundamentally we have to rationalise the regulation for water into one single regulator where it can make the trade-offs between all demands and then work with the water company to make sure that we can meet those demands on an ongoing basis.

**The Chair:** Could I just build on that point—the time lag in delivering on the shift to the growth-focused regulation because of the business plans and the investment commitments signed up? Even if you get the Government to give priorities, could you elaborate on how quickly you could move those constraints to give a sense of the timeline to make this work?

***Mark Thurston:*** We work in these five-yearly business planning cycles so the five-yearly cycle that started in April last year will run to March 2030, so that is the five years. The company pre-dates me. The company started business planning for that five-yearly cycle probably three years prior, so for the next five-year cycle that starts in 2030 we will start thinking about the business plan for that next year because, again, the regulatory process is quite long and drawn out. The assumptions that we made in what is called AMP8—the asset and management plan, and we are now in AMP8—in our AMP8 planning our assumption on housing and other growth in the region was nowhere near what it has turned out to be since we have found ourselves with a new Government. Even Universal Studios was not in the contemplation, for example. These are two examples of broader housing growth and then Universal as a particular site where we are now working with the regulators to decide how we want to accommodate.

If you take Universal as a case in point, I think the plan is to have that site up and running by the end of the decade, certainly the early 2030s, and we have infrastructure interventions to make both in water and wastewater in the next five years to accommodate that. That is not currently in our business plan. We are having direct conversations with Universal about its requirements and what it would fund as a private commercial enterprise but, again, the regulatory system is not really geared up for this level of change. As I said, historically it has been very much on a business-as-usual steady-state basis and this surge in growth, frankly, is giving some indigestion, for want of a better term, to our regulatory environment, both economic and environmental regulation.

**The Chair:** What are the key things that it would need to take to accelerate that transition to deliver on the growth agenda? What could be done?

***Mark Thurston:*** To be fair to Ofwat, it is coming out in March and have signposted to all water companies that where you now have pressures for growth in your region as a water company, it has identified a window of time for what it calls a growth reopener. So, in effect, it is giving water companies an opportunity to go back and make a case for further money—ultimately, it would be primarily through customer bills—to be able to accommodate the growth in this window. That is quite a novel process for it. I think it plays to the point that Annie made about it being quite a cultural mind shift for the economic regulator because it is naturally quite conservative and predisposed to keep customer bills down, but if we want to accommodate this growth in any one geography and the way its charging models work, we need to work with it to make this happen in short order.

Q87 **The Chair:** Staying with the Government's action plan, it includes a commitment to cut administrative costs for business by 25% by the end of the Parliament. How meaningful is that ambition and what are the potential impacts of it? Annie, do you want to start?

***Annie Conde:*** Thank you, Madam Chair. Reducing administrative burdens by 25% is an ambitious goal and would certainly be very meaningful. I think, as someone who works day in, day out with regulators, it certainly sounds attractive to cut administrative burdens by 25%, but it depends on how that 25% is achieved. If we are talking about removing red tape, simplifying processes, leveraging digital tools, trying to be more efficient in certain places, certainly that is a change that would be very welcomed by industry. If instead we are talking about cutting budgets, having less staff, for example, it could potentially harm service levels. I mentioned before the Food Standards Agency is already underfunded so if its budget were to be cut significantly it could mean that wait times become longer, it could mean that the UK loses its position as a potential leader in food innovation.

Regulatory costs have a few different forms. I mentioned earlier the opportunity costs, the amount of time that it takes for us to get approval, but the time to put together a dossier—for example, our UK dossier is over 300 pages of data analytics, with over six months of production runs and three months of external analytics as well added to it—is not insignificant. The production costs are extremely high to do that right now because we are operating at small scale to be able to do this. We also have to engage, for example, with external advisers often and use third-party analytic services to meet the requirements of the Food Standards Agency. All that adds up to the costs that we see.

If the 25% reduction in costs means that we are more efficient and we decide we can take a little bit more risk, have fewer forms, have more streamlined dossiers or more streamlined data, that might mean that not only we get to market faster but manage to cut some of our costs for this. If the 25% reduction means that there is going to be less budget, potentially less advice, less support and resources, that could actually harm growth within the UK. So it is very dependent on how that 25% cost is achieved but certainly if it is about cutting red tape and becoming more efficient it would be something that we welcome.

***Mark Thurston:*** I think your question was about meaningful ambition. I would suggest for water that it is an essential ambition and, as I say, the Government have committed to reform water so, clearly, moving to one single integrated regulator must have benefits on the regulator cost side. I said earlier that we have three separate teams all facing off to the three regulators we deal with, so on both sides of this relationship there is efficiency to be had. That would be my first point around this consolidation.

Secondly, to the earlier question, moving more towards outcome-based regulation that is less prescriptive and is more about what we want to achieve for the environment and customers, so that gives us a bit more discretion and freedom to act once we move through, I hope, a period where there is greater trust between regulators and water companies—that also has an opportunity to drive cost out of the system.

Then there is this move, as recommended by Cunliffe, to create more of a regional-based rather than a national-based model with a one size fits all, so that we have a regional regulator that understands our business and our challenges and we can work together to decide where we deploy human and financial capital to serve the environment and customers. Again, I think there is some opportunity there. This is a layered approach, in our view, but it is an essential ambition.

**The Chair:** The evidence we have received indicates that some people consider the administrative burden of regulation is small compared with the cost of complying with the regulation and the opportunity cost of senior management time, and that is where the biggest pinch is. How would you set out those respective costs in terms of your own business and how those respective costs impact your business?

***Annie Conde:*** In my case, I would say the opportunity costs and the senior management time costs, especially as we are a small team and much of this documentation is being prepared by, for example, our C-level executives, such as our chief scientific officer or head of innovation, are much greater than the administrative burden, if I had to compare one with the other. In my view, making the process itself, the requirements for the process and the timelines for approval or compliance processes much faster would have a much bigger impact than reducing the administrative burden.

That being said, we are in a very different position from some other industries. For example, until now novel foods required reapprovals every five years. That is an administrative burden that companies have to deal with, submitting additional data every five years. Once we have multiple products on the market, maybe I will feel differently about this just because we would have to do resubmissions and update that data. The Food Standards Agency has now removed that requirement so that is a step in a positive direction to reduce those administrative costs, which also have an impact.

Because we are so early on in our regulatory journey, we are much more aware of the opportunity costs and the senior management time costs than the administrative ones, but making the process more efficient is always an important goal to have and, as Mark said, even an essential one. I just do not think it should be the only goal that they have. Making processes more efficient from the start and overall more innovation-friendly should be part of the mandate.

***Mark Thurston:*** For us, it would be moving to a single regulator, where we then have one five-yearly cycle where all requirements come together, we agree with the regulator what those requirements are for the next five years, we put a plan together for those five years and the regulator understands our business and understands why we have put the things in the plan that we have, and then it is about execution once that plan is agreed. It is about investing in assets, looking after our assets, serving our customers and protecting the environment, but because we have three regulators working to different timeframes, as I mentioned before, and we have had new requirements come in for greater environmental compliance and reporting associated with that from the Environment Agency only in the last few months, which could inject hundreds of millions of pounds into our business, it is not in our business plan, it is unfunded work. As an industry we have come together to say to the Environment Agency and Defra, "Do you really think this is a good use of customer money?" because for us to meet those requirements is very onerous. I absolutely subscribe to your point that this is something where there is an opportunity to reduce the burden on consumers, absolutely.

**The Chair:** You referenced faster approvals. Lord Teverson, you have a question on this.

Q88 **Lord Teverson:** One of the areas we have been looking at is the potential use of regulatory paid-for fast lanes—or, as one of our witnesses said, easy boarding procedures. Have either of you used that approach with any of your regulators and do you see downsides or upsides to that ability to use that system if it was available?

***Annie Conde:*** The idea of a paid-for fast lane is certainly very intriguing to us. I think it meets two goals, one of having clarity for timelines—knowing that we can get approval within a certain timeframe. The clarity is more important than the entire time but, of course, the faster the better. It also helps fund the regulator that we are working with, so I think it meets that dual goal of supporting the regulators that we are working alongside. With paid-for fast lanes I think the devil is in the detail. If it ends up being a fee, for example, so high that only a minority of very large companies could take part in these fast lanes, it would defeat altogether the purpose of having the fast lane.

We have not taken part in fast lanes but in the US, for example, there is a very clear timeline of engagement and there is engagement throughout the entire submission process so you can track very easily where you sit along the process, you get feedback throughout the process to understand where your application is trending towards. There is a commitment to receive responses by a certain timeline. While there is guidance in the UK for when the Food Standards Agency will reply to your dossier, oftentimes those timelines are not met. I would say as a general rule those timelines are not met because the Food Standards Agency is underfunded and overloaded with applications. Clarity of timelines is as important as speed of timelines because if we can plan for that time then we can be better prepared ahead of time. We can raise financing to cover that entire time.

That being said, we would certainly be very supportive of a paid-for fast lane if it were implemented well, if it were delivered fairly and also if the approval process was maintained to be as rigorous as it would be in a shorter timeline. We are very wary of paying and then being seen as someone who has had an easier track. Rather, we want to make sure that the process is as rigorous as it would be over the longer timeline but maybe you would get preference over some other applications that are in the review stack because you have paid for that fast lane. The concerns that we would have are, first, making sure that the fees are high enough to be significant and help fund the body to make approvals faster but not so high that no one could partake in them. The second is that there is clarity on what those timelines are and that those timelines are met by the regulator, assuming that it has the data it needs and the submission is complete, as expected. The third, as I mentioned, is that the process is as rigorous as it would be if you had not paid for that fast lane.

**Lord Teverson:** Those are some very useful pointers. Thanks for that, Annie. Mark.

***Mark Thurston:*** It is not something that I have some direct experience of—it probably applies more to Annie—but I come back to a couple of things I have said. If we put water regulation on to a single integrated footing where the regulator understands the water company and there are clear priorities set by government about what we need to achieve, then it is about whether it is in product approval and whether there is a particular regulation, as on the earlier question about innovation. The Drinking Water Inspectorate rightly keeps us on a relatively tight leash around materials in contact with potable water, so there are areas of regulation and approvals that would naturally be more timely if the relationship between the regulator and the water company was slightly more collaborative, that the regulator was integrated so it was making trades between environmental quality and economic impact, and then we could work together on that. It is something that for us would be a key outcome of reforming regulation of the water sector.

Q89 **Lord Teverson:** Thank you. Mark, when I read your CV, I saw that you were chief executive of HS2 between 2017 and 2023 and I was very impressed by your bravery in going from something like HS2 as a project to a water company. I want to come back, if I could, to HS2. It was a project that was absolutely fundamental in terms of national infrastructure. It was very troubled and I am not in any way trying to point where that is; that is not the point of my question but it had all sorts of troubles. It is now only between London and Birmingham and we have cost overruns and all that sort of thing. It is just such a good case study, where you had regulators such as Natural England, I presume the

Environment Agency, lots of local planning authorities and I presume the Department for Transport as well. From that fantastic experience on the front line, what lessons around regulators and growth would you like to give us?

***Mark Thurston:*** That is another committee meeting, I think. Baroness Valentine is laughing because she was on the board of the company for some time. We are seeing it in Anglian now. We have a big pipeline we are building and we will have that finished through the next few years. We have two reservoirs to build. I think the reality of it is that as a country we have probably not been very good at embracing these big grand projects in a way that in Europe and the Far East they have been more successful in combining the local impact with national policy. To your question, HS2 found itself right in the crosshairs of those multiple constituents that we went through and the politics of the day clearly plays out in that regard.

Certainly, I am bringing some of that experience to bear working with my team at Anglian because, as much as these reservoirs will be quite impactful in their construction, what we are seeing, which is a slightly different dynamic, is there is a pull from the local community in the round because the reservoirs will be a force for good. Rutland Water is one of our assets: it is the biggest freshwater reservoir in the country and it really is an asset for the region—huge public amenities, recreation, other social and economic benefits for the area. I think the issue with these big projects is you need to create a pull from the country for it to happen.

If it is top-down, driven by just government policy in one direction and you get that resistance coming back the other way from regulators, agencies and other stakeholders, then, as I found myself for six and a half years, it becomes very challenging, very expensive and politically very difficult. It is a broader issue that HS2 found itself at a particular point in time but many of those issues have manifested themselves for us in our reservoir projects. I do not know whether that answers your question but I subscribe—

**Lord Teverson:** I was not trying to get into the political side of it at all. It was where regulation worked or did not work or what we need to learn from those grand projects, as you say.

***Mark Thurston:*** Yes. I think that is why for water it is important we have a strategic policy statement where government comes out and says what is really clear. If we want a resilient water supply and we do not want to have customers on bottled water or on hosepipe bans or other restrictions—because it is a life-giving product and to some extent, frankly, as consumers we have taken it for granted, primarily because it has been so cheap compared with a lot of other fundamental utilities that serve us day to day—I think we need to be prepared to lean into some of these approvals issues with regulators. Certainly, HS2 found itself in multiple jurisdictions on the whole route plus obviously the hybrid Bill process in itself. Just getting an Act, whether it is a hybrid Bill, as in the case of HS2, we are preparing a Development Consent Order for the Fens

Reservoir and it is a hugely expensive exercise that is going to run for three years or more. This Government have talked about infrastructure and planning reforms. I do not think it is an easy thing to deal with politically but practically there is huge opportunity to take cost out because it is very expensive at every level. That is all I can say. I do not know whether that helps.

**The Chair:** If we can turn to sandboxes, Baroness Harding, you had a question.

Q90 **Baroness Harding of Winscombe:** Back to the subject of the day. Annie, you have already answered my high-level question that you clearly do participate in the cell-cultivated product sandbox. I would like to understand in a bit more detail what problems the sandbox is actually solving. The context I would give you is I think every regulator that we have taken evidence from, in fact every company, has said that a sandbox is a good thing. You are in fact the first witness we have had who is actually participating in a sandbox. I worry a little bit that it is a bit of emperor's new clothes: "Don't worry, we are good at innovation because we have a sandbox". I would quite like to understand what you think it is solving and what you think it cannot solve.

***Annie Conde:*** Thank you, Lady Harding. That is an excellent question. Sandboxes are certainly not a panacea but they are a really effective way to test innovation, test new ways for regulators to work with industry and develop some of these growth-minded policies that industry so wants regulators to have.

Speaking from our experience, from the cell-cultivated product sandbox, the problem that we had, as I have mentioned, is that novel foods regulation was not designed with cell-cultivated products in mind. To give you an example, some of the questions that you would sometimes answer for a novel foods product or a meat product are about the cleanliness of the environment in which you operate. If you walk into a food manufacturing facility, it looks a lot more like a pharmaceutical-grade lab than it does a pigpen so some of the tests that you might have to conduct to demonstrate the health and safety and some of the HACCP (Hazard Analysis and Critical Control Point) standards that you might have for other food products simply do not apply in the environment that we are in. When you have a new product or you have something truly innovative that regulation has not seen before, has not dealt with before, those sandbox programmes can be extremely effective.

For us specifically, the sandbox has been very helpful in helping to shape the requirements that the novel foods process has—I have mentioned allergenicity and knowing what kinds of analytical tests we will have to do. Having more clarity on all of that has been incredibly helpful and more of this guidance will continue to come as the sandbox is ongoing.

What the sandbox cannot do is it does not necessarily improve some of the fundamental flaws that exist with the novel foods process. The Food Standards Agency is trying to reduce red tape on the whole. I have mentioned things such as removing ministerial approvals, removing five-year reapproval requirements, doing things like having pre-submission advice, but the biggest problem with the Food Standards Agency continues to be the lack of clarity in timelines and the delays in the timelines. A sandbox does not address those kinds of issues. Those are addressed by having more staff, more resourcing, more efficient processes. While we are advising the Food Standards Agency on how to have more efficient processes potentially where the risk really exists for a product such as ours, that requires the kind of whole-agency change that I think a sandbox is less effective in delivering. To us, for example, the additional clarity and guidance will mean we can do the research and development, we can develop the process that we need, but if we were to have a single change across the entirety of the Food Standards Agency it would be faster and clearer timelines. I think that is where a sandbox maybe does not create the same level of change because it is a small department within a larger organisation.

**Baroness Harding of Winscombe:** That is incredibly clear. Thank you. Mark, I am presuming that Anglian Water does not participate in any sandbox but that may be my error.

***Mark Thurston:*** We still recognise the term. As I touched on earlier, the Ofwat innovation fund has been very successful. Ofwat, as an economic regulator, has run competitions to make customer money available. We all contribute into a fund that comes from customer money and then you make a bid for that fund to innovate where we think there is opportunity to move the industry forward. I think it has forced water companies to work together because we want to fix these issues only once and certainly on work around carbon reduction, how we deal with our waste and our waste discharge back into the environment, thinking about the application of cyber and tech. There are big concerns around that because a lot of our assets are of national significance and, as I touched on earlier, even looking at effluent reuse.

It is very much maintaining the principle of a circular economy and recycle everything back into the system because everything has an application somewhere. It is about then finding where is the right application, that it is appropriate and it can be regulated, signed off and deployed. There is a good ecosystem there that works, that is driven by the economic regulator. Again, I have said several times, moving to a more integrated regulator where you can look at quality and environment, economics, customer value and all these other requirements and then work with water companies to decide where would a sandbox and innovation be of most value for that particular geography, is the prize for us as we put the sector on to a new footing through the next few years.

**Baroness Harding of Winscombe:** Interestingly, between the two of you—small, cutting-edge; very large and been around for a very long time—you are saying the same thing, which is that you need your regulator to think in an integrated way about how to solve your regulatory problems rather than a sandbox sitting on its own being able to solve everything. Is that fair?

***Mark Thurston:*** Absolutely. It is an enabler for good regulation and good customer outcomes and it is about how to create a flexible environment. I come back to the earlier question around risk and such as: how do we give regulators permission to work with businesses like ours to be prepared to take those risks and trial and error to some extent in a safe environment, recognising that we are both responsible for food-grade products? The standards for that need to be maintained.

**Baroness Harding of Winscombe:** A necessary but not sufficient condition to have a sandbox?

***Annie Conde:*** It is certainly a helpful condition, especially when you are talking about something innovative, but sandboxes are by definition usually narrow experiments, shall we say, to make things a little bit better. It is important that sandboxes do not become one-off experiments but rather that those learnings are then implemented across the regulator. They are a helpful test bed for regulators to work more closely with industry to tailor regulation to innovation and even in some cases to deal with very specific issues that they may not have encountered before, but they are not the be-all and end-all to solve issues. They are certainly very helpful for innovation, and we have found that with the sandbox. I am happy to speak more about that if that would be useful.

**The Chair:** Regulator accountability—Lord Thurso, I think you had a question.

Q91 **Viscount Thurso:** As the Chair said, I would like to turn to the accountability of regulators, which is something the Government have said they would like to see happen. From your perspective, what would define good regulatory performance and what mechanisms should the Government use to assess regulators? There has been much talk of the possibility of Key Performance Indicators but whatever you decide to make a Key Performance Indicator is what people manage and it might not provide the outcome that you want, although they are a very valuable management tool. What are your views there and to what extent should the Government take on board industry’s views when assessing the performance of a regulator?

***Annie Conde:*** From an industry perspective, good regulatory performance could be summed up in four different qualities. The first one is clarity, which, especially for a novel product such as ours, is difficult right now. The second is timeliness. The third, especially when thinking about consumer-facing products, is proportionality. The fourth, which we have benefited from a lot in the sandbox, is engagement and trust.

For the first one, in terms of clarity and guidance, having very clear regulation that is tailored to the products and services going through that regulation invaluable. Whether you are thinking about building an infrastructure project really long term or about, for example, in our case submitting a product that has not gone through a certain process before, having very clear guidelines and regulations, clear guidance that is predictable and does not change over time, is of the essence. For us, good clarity is when that guidance is met, when it is comprehensive and it is sufficiently clear that it means that businesses such as ours can efficiently meet it from the start without a lot of back and forth with the regulator, without new regulations coming out up front.

For the second, in terms of timeliness and efficiency, I have spoken about this quite a bit but to us a high performing regulator should process dossiers or reports that it receives in a timely manner. Providing feedback within weeks and even giving clarity as to when that feedback is going to come is extremely important. One thing that we were discussing among our team is if you need a paid-for fast lane does that not indicate that something is wrong with the underlying process because everything is taking so long? To us, timeliness—

**Viscount Thurso:** Can I just check on that? It seems to me that there are two parts to that. The first part is the target that is set. You talked about it being 30 months in the UK versus 12 in Singapore so it is about the UK, for example, saying, "Right, we will do it in 12 or 16 or that is our target" and that is acceptable to you. The second part is the measurement of whether we have met the target. Do you have any views on the two aspects of that?

***Annie Conde:*** You are precisely right. There are two aspects there. One is the length of the process and the other one is whether the timeliness has been met. Technically, the novel foods process should be 18 months but, as you can tell by the fact that it is more often than not 30 months, that timeline has not been met. That has been a consistent issue with the Food Standards Agency. Clarity matters the most, but speed and efficiency mean that the UK can take advantage of these processes and become a leader in this new area. In fact, the sandbox has brought together companies from the Netherlands, the US, Australia and the UK because they want to work with the Food Standards Agency to make this process more efficient. That includes both aspects of it: making it faster, so committing to that 18-month timeline and even making it faster, if we can, without sacrificing safety, but also making sure that that timeline that the Food Standards Agency commits to is met. Those two aspects are both very important. Where the Food Standards Agency has especially been falling short recently is in meeting that timeline that it has set for itself.

**Viscount Thurso:** It sounds to me that establishing the timeline at the start and then measuring it as a key performance indicator for the regulator is pretty much at the top of your list. Is that an accurate summary?

***Annie Conde:*** That is very accurate.

**Viscount Thurso:** Thank you. Mark, what about you?

***Mark Thurston:*** I would make three points when it comes to regulatory performance and accountability. I have said it already but having clear policy and direction from government—so regulators need to know what they are accountable for and I think we have seen an absence of that historically in water—is an important part of being able to hold certainly a single regulator to account. Once you have done that, there is an opportunity to create some alignment between government, regulators and consumers, and we do not have that, frankly, at the moment in water. It is easier to measure performance. There are many things that we can then measure such as asset resilience, service of supply, environmental health, customer satisfaction, that we get measured on as a water company but arguably they are equally as relevant to a regulator if you move to a more integrated regulatory model for water.

Finally, putting some form of balanced scorecard around that in the way you could measure regulatory performance is perfectly legitimate. Anglian has written a thought piece paper—which I am very happy to share with the committee—to inform Defra in its thinking for the new regulator for water because it is moving to a more balanced scorecard where we all align around the things that matter to us all in the system—government, regulators, water companies and consumers. That is going to be important going forward and that has got a little bit skewed, frankly.

**Viscount Thurso:** Thank you very much. I am sure that any thoughts you have will be warmly received by the Chair.

**The Chair:** Yes, if we could take up your offer that would be very helpful.

***Mark Thurston:*** Yes, no problem. We will do that.

**The Chair:** Staying with regulatory issues, Lady Valentine, you had a question.

Q92 **Baroness Valentine:** I should declare before I start that I have known Mark off and on for decades, I think—on the Olympics, Crossrail and HS2; specifically on HS2, I was on the board when he was chief executive, as he referenced earlier. If I can just make one observation on Mark’s reply on the earlier question on HS2, the point about political pull is one I completely agree with. If you look at Crossrail it did not complete until the mayor pulled it over the line because of the risk aversion of the existing Transport for London people who did not want the hassle of additional trains running through their station or whatever it was, so there was that resistance to pulling it over the line. With the Olympics, having a set deadline worked wonders because everybody had to align to that. I completely agree with the political pull point.

Anyway, back to the question I am supposed to be asking: the Government announced a number of regulatory mergers, obviously including water. It does not need to be in the water sector but have either of you experienced regulatory organisational change and how has that affected your business, either in your current life or past lives? Mark, I imagine most of this is ahead of you rather than in the past. Annie, do you have anything to say on that subject?

***Annie Conde:*** We have not yet been through a major regulatory change such as a merger or an agency overhaul. One place where we are interested to see what will happen is with the Regulatory Innovation Office. It is a relatively new body and it is still unclear how it will interact with other regulators. For us, knowing whether it will affect Food Standards Agency innovation is important. For example, one of the issues that we have is we want to manufacture here in the UK but as part of that we need a facility inspection that will need to be done in conjunction with anywhere else we want to sell. So Defra would have to co-ordinate with the Singapore Food Agency, if we wanted to sell there, to conduct a facility inspection here. One of the things the Regulatory Innovation Office is trying to do is to co-ordinate innovation across different nations, so that would be something we would be interested to see—how it works with those other regulators. We have not yet been through a major agency change or overhaul so the main thing we would be looking at is how the Regulatory Innovation Office will interact with other government agencies and with the regulators we are working with right now.

***Mark Thurston:*** You are right. Generally, for us, it is looking forward on water and bringing the Environment Agency—some but not all of it—the Drinking Water Inspectorate and Ofwat together is a not insignificant exercise. That probably depends on what bits of the Environment Agency would go across but you are looking at creating an organisation of somewhere between 1,000 and 1,500 people in multiple locations and you have to create some sort of central entity there but also these regional branches, almost, that face off towards the companies. I think we should not underestimate the challenge organisationally or otherwise to create that merger. Certainly, the water companies, through our trade body Water UK, have been very keen to support that process. I think the water companies are very keen to work with all three agencies and government to ensure that we get the regulator that we need on the back end of that process, and that it is a bit of a clean slate and a bit of a reset rather than some slightly hybrid model where we mush together what we have today and it is neither one or the other, and we are in the worst of both worlds, where the new entity that emerges from this process is not effective for customers, the environment or water companies and investors. The Government have come out and said they are going to issue a transition plan some time early this year on how they intend to move from the current model to the future.

Just by way of my own experience outside of water, if I think about the railways and the regulator, the Office of Rail and Road working with Network Rail for many years, I do not want to speak for my colleagues at Network Rail but my observation, having worked in and around that arena, is that that has created a good understanding and a long-term relationship and that regulator understands the demands of maintaining our railway infrastructure over many decades. We live in hope that the reforms this Government have committed to will give us a similar model going forward for water.

***Annie Conde:*** If I may add on to that, if we are thinking more forward-looking, one thing we may have to manage is there is potential for UK realignment with the EU on food import and export, especially as a single phytosanitary zone. This is something that is being discussed right now but one of the challenges is that European Food Safety Authority, the regulator in Europe, has the legacy novel foods process so a lot of the innovation and progress that has been made, if the regulations were completely aligned with Europe would be lost and a lot of the work that UK regulators have done might be undone. This is something that is still being discussed so we do not know how it is going to play out but I think there is a way where the UK can maintain some of the innovation, have a carve-out for some of these products where it has made strides, and maintain sovereignty over its own food decisions while still collaborating closely with the EU. That is another item where, more forward looking, we are thinking about what might change a regulation or might cause an overhaul of how the FSA works depending on how aligned the UK becomes with the EU.

**The Chair:** Lord Gilbert, you will take us to our final question.

Q93 **Lord Gilbert of Panteg:** Thank you for your evidence. Could I ask you to look a little bit beyond your own sectors for the moment? You have talked about how your regulators need to be more joined-up, more streamlined and, in your case, Mark, brought together. Do you see a role, an opportunity, for regulators to work together across sectors to improve best practice and to learn from each other? There is a certain amount of work in some sectors—the regulators in the digital environment come together and I think the Institute for Government does some programmes on regulatory best practice—but do you think there is scope for somebody to bring regulators together so that they learn from each other, from other regulators in the UK but also from overseas? That is a general question. Then, more specifically, one of the issues I think regulators face is recruiting higher-paid specialists in technical roles and is there scope for regulators to perhaps jointly recruit and have some centres of excellence and expertise that they can all draw on rather than each hiring in similar roles? Mark, do you want to go first?

***Mark Thurston:*** My understanding is there is some interaction, particularly in the statutory utilities arena, and learning between regulators. I happen to have two board members who have a deep understanding of the power generation sector and they talk very positively about Ofgem. The relationship between the power companies and Ofgem feels, in their view, 10, 20 years further forward, more mature in terms of how they work together compared with what they observe we have with Ofwat. There is, no doubt, good practice in the UK market and there are some good examples. I would certainly come back to Baroness Valentine's question around the merger. If we think about a new integrated water regulator there is a lot of good practice certainly overseas but also at home here that we can adopt.

On the other two points, quickly, there is no doubt that if we move to a much more regional regulatory model the skills demographic in the regulator becomes more important. For example, Cunliffe observed that there is very little engineering expertise inside Ofwat at the moment. The Environment Agency by its nature tends to be skilled on environmental science—I am generalising—and then obviously with the Drinking Water Inspectorate, chemistry plays a big part in what we do there. To understand our business, particularly with the agenda around growth and investment in infrastructure, to come back to the question about my background and, to some extent, why I am in this job, the regulator having a more nuts and bolts understanding of what it means to be an infrastructure steward, to invest in assets and build assets going forward, is going to be an important part of the skills mix for a new, integrated regulator for us.

On the other point around centres of excellence, shared skills, there is clearly some stuff around some of the economics. There are issues around managing growth because if you think about telecoms, water and power in our region, there are demands on all fronts to facilitate growth. There may be some opportunity there but certainly, for us in the east of England, we would want to see a more technically based regulator that we can face off to in a new model.

***Annie Conde:*** There are certainly opportunities for regulators to learn from each other when things have gone well or when they have made improvements. For example, some learnings from the sandbox might be transferable to other agencies in terms of how to make processes more efficient or removing unnecessary administrative burdens or maybe legacy processes that are not as useful. While there is some interaction between regulators, unless that is institutionalised it might be difficult to achieve unless there is a mandate to speak to other regulators and understand what changes they have made that have been well received and have been effective. It can be quite difficult to translate from one regulator to another. There is a reason there are 90-plus regulators within the UK but maybe there could be fewer.

There are also a lot of opportunities to learn from other countries, other nations that have done certain processes well. I can speak most confidently about some of the ones that I have mentioned now because those are the ones that we are engaging with as part of the cell-cultivated product space; for example, the timelines within the Food and Drug Administration, the clarity that it gives, the expertise that it has in-house, which is also something that you have mentioned are things that it has been able to develop because it has been working on this innovation for a very long time, because it started early. Funding is also a key concern. Despite some recent issues, the Food and Drug Administration has very strong funding, which means that it is able to attract top talent and people who have a lot of expertise where needed, which can be a concern depending on what regulator you are talking about. There are opportunities to learn from other countries and see how they have managed similar products in the past. In food, the Food

Standards Agency could certainly learn a lot from the Singapore Food Agency and even from some of the Netherlands local authorities which have created special spaces for consumer tasting, for funding innovation, promoting food innovation. From the Food and Drug Administration there is a lot the Food Standards Agency could learn in terms of clarity and timelines, efficient processes and hiring.

As to your second question on expertise sharing, it could be possible but it would depend very heavily on what regulator you are talking about. For example, the Food Standards Agency might benefit from having some expertise from the Department of Health and Social Care or other health regulators because the processes that it is seeing are becoming more and more technical and maybe fall under the expertise that some of those agencies have. I could see a place where there could be some resource borrowing across agencies when you are thinking about novel products, but I think there is a limit to how useful having a central pool of talent can be, just because the variety of regulators exists because there is a lot of variety of expertise that is needed.

**The Chair:** We have come to the end of our questions, you will be relieved to hear. I take the opportunity to thank you both for attending, your input and for addressing the questions, which is much appreciated, and we will reflect on the comments that you have made to us. Thank you very much indeed and we will end the public broadcast now.