



HOUSE OF LORDS

Industry and Regulators Committee

Corrected oral evidence: Regulators and growth

Tuesday 10 February 2026

10.30 am

Watch the meeting

Members present: Baroness Hayter of Kentish Town (The Chair); Lord Barber of Ainsdale; Lord Best; Baroness Carberry of Muswell Hill; Baroness Drake; Lord Fuller; Baroness Harding of Winscombe; Lord Teverson; Viscount Thurso; Viscount Trenchard.

Evidence Session No. 11

Heard in Public

Questions 131 - 144

Witness

[I](#): Lord Willetts, Chair, Regulatory Innovation Office.

Examination of witness

Lord Willetts.

Q131 **The Chair:** Welcome to this evidence session. This is the Industry and Regulators Committee. I would like to welcome you all here. I am Dianne Hayter. This is part of our inquiry on regulation and growth. The session will be broadcast live. There will be a *Hansard* transcript and if there are any corrections that need to be made you will, of course, have the opportunity to do so. Can you introduce yourself before we start the questions?

Lord Willetts: I am chairman of the Regulatory Innovation Office (RIO) and a Member of the House of Lords.

The Chair: We are very pleased to see you back on your own territory. I would like to start by asking about the Regulatory Innovation Office. How has it worked both within government and with regulators to try to make regulation more open and perhaps less risk-averse?

Lord Willetts: Yes. At RIO we are based in the Department for Science, Innovation and Technology and our approach is very much focused on regulatory barriers to innovation and new technology. Ministers have set four priority areas—drones, engineering biology, space launch and AI in Healthcare—and they have just added two more important priority areas, robotics and the use of technology in defence, which have literally just started in the last few weeks. I would say that where we can help is that we first raise the salience and try to help regulators think in a tech-positive way. We have a modest amount of money in funding and almost every regulator I talk to says, “Yes, we would love to do more on this, but we don’t have the capacity”. We cannot fund everything and they have to prioritise their own resources, but we can help direct some money into that. We also appreciate having very strong ministerial support going up to the Chancellor, who herself chairs round tables with regulators and works with us to get them to be much more energetic and helpful in promoting new technologies.

The Chair: Thank you. That starts us off very nicely. We will now turn to Lord Teverson.

Q132 **Lord Teverson:** Before I was a member of this Select Committee, I had not really even heard of your office, which is my fault, not in any way yours, but it raises the question in my mind as to what levers you have to influence regulators. As you said, your remit, perhaps quite correctly, is relatively narrow in the universe of regulation in the UK, but in a way, being a part of the Department for Science, Innovation and Technology, do you not need to be rather more close to the Cabinet Office to have an effect in this area? You get that reaction, “We would like to do it but we can’t”. What can you do to say, “Well, you have to do this because this is around growth and around future and it is important for the country”?

Lord Willetts: We have been in existence for only just over a year and I have been chairing it for less than a year. The lead overall on regulatory policy is with the Department for Business and Trade (DBT). We understand that and we work closely with it at both ministerial and official level. We have a specific focus, which I think is a good thing and an asset, focusing on new technology and innovation.

As I said, we have a small pot of money that we can use to promote our objectives. We are particularly keen on having regulatory sandboxes, where you can work with a particular regulator and a particular industry that is affected. With the Food Standards Agency (FSA) we have launched a sandbox on cell-cultivated products, and the aim of that is to reduce by a half the regulatory time it takes for a new food using cell cultivation to get on to the market. It is currently five years. We aim to do it in two and a half years. The FSA would say that that initiative is happening only because we work with it and help fund it. Already the readings we get from the tech community are that the number of companies that are setting up in the UK to develop and market those products is up because they know they can have a place in the sandbox and a regulatory route through will be found for them. It is a technology-specific role in the technology department, and I think that makes a lot of sense.

Lord Teverson: Is the funding or offering financial support for particularly sandboxes the core part of what you are able to do, or am I oversimplifying or minimising it?

Lord Willetts: It is an important tool. We are not talking about large amounts of money. I think the money we are putting into the FSA sandbox, for example, is about £1.5 million. Interestingly, as an example of the wider legal environment in which regulators now have to operate, the FSA said to us that the fact that we had prioritised it and come to it with some money meant that it was less open to legal challenge from other food companies that wished the FSA to prioritise something else for them. The FSA is an extreme example of this. It has a very heavy burden. It is still busy doing post-Brexit domestic regulation and it has been a massive challenge. One of the levers is money.

As I said, we have the lever of ministerial support going up to a high level. I also think that we can just broaden the regulators' perspective. A lot of the regulators are very focused on operational issues in the world as it is today. By turning up and saying, "Let's talk about how your regulation is inadvertently an obstacle to a rather different world tomorrow", I think they find those conversations very helpful. We are very granular at RIO. We will literally have a meeting where we bring in some exciting tech start-ups. We will have one or more regulators there. I or our officials or a group of us will be there, and we get down to specifics. I was at a meeting last week and it was, "What exactly does this sentence in Schedule 7 mean? How are you interpreting it? Do you understand the impact of that interpretation on this set of technology start-ups? Couldn't you interpret it in a slightly different way to make life

easier for them?" We really get stuck into that type of stuff, and I think it is the right thing to do.

Lord Teverson: In a way you are enthusing regulators to make their life more interesting and exciting. Are they receptive to that?

Lord Willetts: I took one technology innovator to the Medicines and Healthcare products Regulatory Agency (MHRA) and I remember the chief executive of the MHRA saying it was the most interesting meeting he had had all week, so I thought we had done something there. But the purpose of this is not intellectual interest. The purpose is to ensure that our regulatory regime supports innovation and new technologies. We are a pressure on them to think in a slightly different way about new technology.

The Chair: I may be going too far, but it sounds to me as if your talking is as important as the money you have to spend. Is that overexaggerating it?

Lord Willetts: When you say "talking", it is what we do and we are greatly helped by partnership with some outside bodies that help us identify specific problems—organisations such as techUK, the Confederation of British Industry (CBI) technology committee and the Startup Coalition. They feed us; they help us. They say, "There is a pattern here. We know four start-ups that are all encountering the following specific issue in regulation".

We do have convening power, so it is not just chat. We really get into exactly what the issues are. Sometimes it is venture capital (VC) funds and internationally mobile VC funds that will say, "We will give up investing in this technology in Britain. We will put all our money into Singapore because it takes so long". The VC funds, which often have the great advantage of a global perspective on other countries where this technology is being developed, or internationally mobile companies say, "Why is it so slow here? Why have you created this specific requirement that they don't have in some other countries?" You may find anything from custom and practice by a middle-ranking official in the interpretation of a certain set of words, at one extreme, through to a genuine barrier in primary legislation. The Highway Act 1835 is quite an obstacle. Forbidding carriages on pavements is quite an obstacle to robotic delivery, believe it or not, and we have been persuaded that at some point we will have to amend the Highway Act 1835 to provide the legal certainty that internationally mobile operators require.

The Chair: We knew that from your pamphlet. We have all read it, and I think that was one we noticed.

Q133 **Viscount Trenchard:** I know that the Regulatory Innovation Office (RIO) has not been on the scene for very long and, even before you were established, several regulators had adopted competitiveness and growth objectives or "have regard to" criteria, so there was an effort by the Government to support economic growth through the regulators before

you were established. What prevented that being successful and what lessons have been learned from that?

Lord Willetts: There were already various initiatives. Indeed, the Regulators' Pioneer Fund already existed and there was legislation in 2015 to bring in a requirement to have regard to growth. Sadly, by and large, it has not had the impact one would have hoped. So giving it [the Growth Duty] greater salience and greater priority and that in turn enables us to have a greater legal back-up that what we are doing makes sense. I do not want to get into invidious comparisons, but the Financial Conduct Authority—partly because it clearly has a remit of ensuring the City of London is a successful global financial centre—has had taking account of growth as a high priority in the way it operates, but some other regulators less so.

Q134 **Viscount Thurso:** I want to ask you about risk. The Government have made it clear that they feel that regulators are too risk-averse and they want them to have a bit more risk-hungry appetite. Do you support that goal? Have you found it to be true that regulators are risk-averse, particularly with your comment earlier that quite a lot of them are just in the weeds of daily operations? On top of that, do you think they understand risk as the barrier that you get out of the way in order to succeed, the comet that is coming and there is nothing you can do about it, or what you must take in order to get a reward? Is there a genuine understanding of risk? Is it a barrier? Are they risk-averse and what should we do about it?

Lord Willetts: That is a very good question. There are sometimes genuine risk trade-offs. I have literally come from a Resolution Foundation event where one of the speakers was the chief executive of the Financial Conduct Authority (FCA). He was making the point, which I think he has also made to the Treasury Committee, that he thinks the regulation on mortgages has become excessive and this has become a barrier for younger people in particular to get started on the housing ladder. He thinks—he is explicit about this and the process is now under way—that we should liberalise the regime, even if that means there is a slightly higher risk of default and a few more people subsequently get into difficulties in their mortgages. He thinks we have to balance that against many more people getting into the mortgage market. There are occasions when it is a policy trade-off, and ultimately that is something for Ministers.

When it comes to risk and technology, my experience is that often the regulators have a very narrow interpretation of risk—risk that is operationally directly in their area. The example that I use, and indeed that I cite in the pamphlet—I am not picking on the Civil Aviation Authority—is that it is absolutely focused on safety in airspace. If you want to fly drones, it is worried about the risk of a drone colliding with a helicopter or something. As far as I know, there has never been in civil use a fatal drone accident in Europe, but anyway, it is managing airspace and it thinks about that. One of the ways we can change its perspective is to turn up and say that there are 40 workplace fatalities a year. The

biggest single reason is falls from a height. If we can use drones to inspect tall buildings and other objects—pylons, where the Department for Energy Security and Net Zero has a priority of modernising the national grid—instead of people having to climb up ladders, this is a net reduction in risk.

I have been interested in the delivery of defibrillators. There was an excellent piece in the *Sunday Times* this week about the Welsh Ambulance Services trying to improve their services by, among other things, using drones to deliver defibrillators for people in a heart attack emergency. I said to the Ministers in my report that presenting this as, “We will have much more risk” is not the best argument. The best argument is often that we have too much risk and if we take a broader perspective we can make the lives of British citizens less risky.

Defibrillators and drone inspections of tall buildings are an overall net reduction in risk for British citizens, but the regulators need a ministerial steer. If you are busy, if you had training and your job is thinking about the safety of airspace, someone who turns up and says, “You do realise how you can use these drones to reduce workplace accidents” is a new perspective for them. Sometimes they can already take account of that within their terms of reference. At other times you need a much clearer ministerial steer to attach value to these services, and it is even possible that sometimes you may need legislative changes.

Viscount Thurso: How much do you think it is the language of risk that is misunderstood? The word “risk” to anybody who is not involved in risk management equals danger and avoid at all costs, whereas to anybody who is involved in it and doing a risk register it is identifying the things that might need to be dealt with and taking the steps to ensure that they do not happen, which is different. Do the regulators understand the language?

Lord Willetts: I think some do, but you are right. There is risk; there is hazard; there is uncertainty. I suspect I am looking at an expert here. I do not blame them for it. A lot of this is just that they are highly operational people and we are trying to get them to look at things differently. Indeed, when it comes to whether they are risk-averse, the fact that they have not put any effort into creating a regulatory regime that favours a new technology because there are no staff doing it often appears to the senior management just like an operational issue. We reframe it as an inadvertent barrier to new technologies because they are not covering this new technology and regulating it appropriately. They are busy people, highly focused on a set of operational issues quite narrowly defined.

Baroness Drake: I will quickly build on those questions and your answers, particularly the ministerial steer point. I read in your King’s College policy publication: “We need to accept some risk to enable innovation and progress—it is a key role for ministers and parliament to set that risk appetite”. Can you elaborate on how they should set that appetite, given that the tolerance of risk will vary across different

regulatory jurisdictions? How do you bring that assertion of a principle into effect?

Lord Willetts: The ministerial steer letter can become a long list of things that regulators are to take account of, with no priority setting and no persuasiveness about the benefits that could come, especially from new stuff. It is Ministers who decide, who we report to and who we advise. I would love to see ministerial steer letters that have a stronger sense of priority. I am very wary, having been an elected politician, about just saying, "We want more risk". I do not think that on its own it is a great argument. We want to have proper understanding of risk and understand areas where this technology can lower risk, not increase risk, and put some of that in a much meatier, more explanatory steer letter. I think there is an exercise currently under way in the Treasury, and there will obviously have to be a very strong growth element. The ministerial steer letter is an underused instrument at the moment, and it could have much more effect.

Q135 **Lord Fuller:** David, what I think I have heard you say is that there is a potential for a narrative, a story, to be given to regulators. In the tension between risk elimination, which you might have said is the default position for regulators, and the more positive, much more flexible narrative approach, telling the story, do you have any experience of when the narrative bumps up against the hard facts of the regulations themselves and, for all the warm words there might be in a narrative, it is just not deliverable? How do we get around that?

Lord Willetts: You would be surprised at the amount that is interpreted. Partly from political and parliamentary pressure, and I understand this, you have to take account of noise from drones. We are trying to get a proportionate assessment of noise from drones, recognising that motorbikes and delivery vans are quite noisy. Again, that is one of the problems. New technologies are sometimes appraised on the basis of perfection and not compared with a real alternative.

My personal view, and government have not expressed any of this, is that our parliamentary process for novel foods is quite demanding. Speaking more as a parliamentarian, we as parliamentarians, both in the other place and here, are all wary of what we call Henry VIII clauses and anything that looks like the weakening of parliamentary scrutiny. If you check through *Hansard* I may well have made such speeches myself in the past. If I may say for this committee, what strikes me when looking at different regulatory regimes and different technologies is that in some areas the level of parliamentary process involved in changing a regulation or permitting a new technology is quite onerous compared with some other areas. This is not Ministers speaking. This is my personal view, speaking as a parliamentarian about some of the business that comes through the House of Lords. We absolutely need parliamentary scrutiny, and the democratic accountability of Ministers is one of the reasons why I attach a lot of weight to the steer letter because Ministers should then be held accountable for what they are proposing, but we need some

assessment of exactly how we can best scrutinise legislation and regulation without it being too intrusive.

I will give you a practical example of what the Financial Conduct Authority's (FCA's) sandbox for financial service innovation permits. Let me flesh it out. It has a special power in legislation passed in about 2014 to suspend regulations in its sandbox. Most other sandboxes—and we fund several—do not have that degree of freedom, so you find that you cannot properly test out your new technology because you still have to comply with all the regulations in the sandbox. It has to be managed prudently and the regulators ultimately have to take responsibility, but the FCA-type model where you can suspend more regulation within a defined sandbox to try out a different way of doing things would be a pro-innovation measure. But it would involve us in Parliament legislating for an FCA-type permissive regime, which does not currently exist, I think, anywhere apart from the FCA.

The Chair: It might depend on whether it is a financial loss or a safety loss, which is presumably the risk.

Lord Willetts: Yes. The question is whether in some of these areas there is a safety gain that you can find only if you try a different way of working. The remit we have from Ministers is not to go around and make life more dangerous for people. In most of these areas, ultimately, the new technology will make life safer for people.

Q136 Baroness Carberry of Muswell Hill: You have helped us understand some of the barriers that prevent some regulators responding optimally to the work and your attempts to assist them. Can I take you back to what you said in answer to a couple of questions about the money? In your pamphlet you say that regulators tell you all the time that they are busy and understaffed and do not have capacity to help promote innovative new technologies. Is there enough money? Is there a different mechanism that the Regulatory Innovation Office (RIO) could use to more effectively support regulators, or is there a fundamental issue that the RIO is underfunded itself? Could you say something in this context about the sponsoring departments as well?

Lord Willetts: There certainly are capacity constraints. Organisations cannot do everything, and sometimes what we are saying is, "Can we rebalance the priorities within your organisation?" Sometimes an easing up of the regulation can save staff. We are working with the Civil Aviation Authority on space launch regulation and some of the regulations it is applying. If you try to license every individual space launch rather than, once you have a category, licensing a series of them, you have an efficiency gain as well so you may not need so many staff. I work within the budget set by Ministers, within what we think is a modest budget through both our AI funding and our regulators' pioneer fund, and we are already having an impact. If there was more in the overall Department for Science Innovation and Technology budget we could do more, but I fully understand that we have to work within priorities. I am not going

around asking for more money. I am busy trying to use the money that we have as best as we can.

Q137 Baroness Harding of Winscombe: I am interested more broadly beyond the Regulatory Innovation Office (RIO) itself. How much do you think regulators can enable growth and innovation simply by doing their day job better and doing it faster rather than doing it fundamentally differently?

Lord Willetts: That is a very fair point. Sometimes what looks like risk aversion from regulators is just that it is slow and takes too long. Incumbents can be patient but if you are venture capital funded you cannot afford the time. A lot of this is trying to speed processes up. One thing we can do is move wherever possible to simultaneous, not sequential, assessment. If it is a general-purpose technology, you may well find that there is more than one regulator involved. Sometimes one regulator has historically come after another regulator, and it is about bringing together a group of regulators to share information and, if more than one regulator has a role, doing the assessment at the same time rather than one regulator passing it on to another. There are practical things like that.

The Digital Regulation Cooperation Forum, which existed long before RIO, was a great initiative. It helps to do that and we have applied it. There is a quantum group and there is an engineering biology group where you try to bring together different regulators and to work out how they can co-ordinate and work at the same time.

Baroness Harding of Winscombe: We have all read your King's pamphlet, as you can see. You reference some of the learnings from the vaccine development during Covid. Do you think we have learned those lessons of parallel processing and pace as opposed to process?

Lord Willetts: There is really practical stuff, such as people providing almost identical data in different forms from different regulators and data sharing, which sometimes regulators think they are not allowed to do and when you look into the detail you find that they are allowed to. They want a degree of ministerial permission. The fact that we come and nudge them on such issues helps make them happen and make them feel a bit more comfortable about things such as sharing information. Yes, there is still a lot more to do on things like that.

Baroness Harding of Winscombe: I was quite closely involved in it. During the pandemic you had this alignment that the whole world wanted out. How, in the normal times or maybe quasi-normal times that we live in now, can you take that learning? How do you move from stating that it would be great if regulators moved faster and worked together to making that happen?

Lord Willetts: It is literally sitting with groups of regulators on practical examples and working through whether one needs to wait for the other. We had a company that was setting up to use drones to distribute slug

pellets. It thought that after it had Civil Aviation Authority approval it then needed separately to get Health and Safety Executive (HSE) approval. We just got them all in a room together and did practical stuff. On some of the things that it thought the HSE needed to regulate, the HSE concluded that it did not even have a regulatory requirement.

We cannot do it everywhere. We are a relatively small group of people. As I said, we work in the four priority areas set by Ministers plus the two that have just been added. But in those areas we know the regulators; we know the groups of regulators. We convene them and in a constructive spirit—not beating up on the regulators—we work through, especially with real start-up companies in the room who will say, “We first of all had to go to the Medicines and Healthcare products Regulatory Authority (MHRA) and then we had to go to HSE and then we went to Defra”, or whatever. You can literally have them all in the room and agree a process and a target for shortening the time it takes or doing it simultaneously. That is what we do in specific areas.

The Chair: You said you are a small group of people. How many are you?

Lord Willetts: I think we are under our official complement. There are about 25 people working in RIO at the moment.

Q138 **Lord Fuller:** Innovation is often so new that only the innovator knows what it is and everybody else does not know what they do not know. Your role, if I was to put words in your mouth, is to help regulators convert unknown unknowns into known knowns, to misquote Donald Rumsfeld. But you cannot be everywhere and the new perspectives point, which I thought was very persuasive, can go only so far. How do you help UK companies navigate the regulations and the regulatory path? If the regulator is an unknown unknown they might think, “It is nothing to do with us”, whereas in fact it might be. First, how do you help those regulators say, “Well, it is to do with you. You just didn’t know it”? Secondly, what processes can you envisage whereby start-up companies that are having difficulty can have someone pushing them forward so that they say to the regulator, “No, it really is down to you. Open your ears and try to solve this problem”? There are only 25 of you, as we have just heard, yet there are hundreds of companies that will generate wealth and just do not know how to access or navigate the system.

Lord Willetts: So far, in our first year or so, we think we have engaged and tried to help about 150 companies. I think we have really helped them, but I realise that there is a lot more to do. The message goes out to groups such as venture capital investors that Britain is a more pro-innovation environment.

This is another area that we are still thinking about, and the committee could if it wished. I am sure it is a vital area. We talk so much about regulating AI, but it is very interesting to think about AI for regulation. When you think about what you have here, you have a corpus, a body of regulatory material and documentation—not all of it machine readable, by the way, and that is something else we are trying to fund. If you were

trying to work out how to give a technologist a guide, it seems like a well-defined body, a limited language model, where you might think that unleashing AI provided some capacity to help understand the system.

You then immediately face some tricky issues. Will this be the regulatory advice or do you then go to the regulator? That is one delicate area and it is probably guidance, not the decision of the regulator. What material would you use? You start off with the published material. One of the barriers—and again this is all tricky stuff and trade-offs, and this committee might have a view—is that individual decisions by a regulator to an individual technologist are often commercial in confidence. How you convert a commercial in confidence individual decision into useful advice for other technologists is another challenge. It may be that if you can formulate your AI program correctly you can distil wider lessons from a commercial in confidence decision without breaking the confidentiality. You can completely understand that the individual technologist does not want her or his technology and exactly what they are trying to do broadcast, so confidentiality is often part of the regulatory deal. You can see how AI could help with some of those dilemmas that we wrestle with at the moment.

Lord Fuller: First you have to get a particular regulator to take it on rather than to fob it off on to somebody else.

Lord Willetts: Yes. As I said, the Digital Regulation Cooperation Forum is the original network of regulators. There are four of them and it has the most cohesive identity. It has Ofcom and the Information Commissioner's Office. Out of our budget we have provided them with about £800,000 to make a lot more of their documents machine readable just so that you can use AI more efficiently. IBM, and we are very grateful for this, is hosting a hackathon next month for people who have smart ideas for using AI to improve access and the use of regulations. We are looking forward to seeing what turns up on the day.

Lord Fuller: That sounds very exciting.

Q139 Lord Barber of Ainsdale: You have talked about some of the work that you have done with particular regulators, but have there been key wider lessons that you think are relevant more broadly for the wider regulatory community? What mechanisms do you have to try to get those around the system? You talked about the convening power of the organisation, and that is potentially a mechanism. How much do you see it as your mission to extract every relevant lesson that might be coming out of all the work that you are doing with particular regulators or particular groups of regulators for the wider community?

Lord Willetts: First, as I think I say in the pamphlet, Jon Cunliffe's report about what has gone wrong with the water industry and water regulation is a very good guide to the issues. It is what happens when you have a totally fragmented system, lots of highly specific obligations and no overall custodianship, if you like—no systems thinking. My view is that this is a legitimate role for democratically accountable Ministers in

their departments. There is a belief that regulators should be totally arm's length and, of course, it is very hard for Ministers to get involved in individual decisions. That is why I think that proper, strong steer letters about the priorities of a democratically responsible Government and what should be done are a perfectly legitimate role for Ministers. That is one of the ways of getting the wider perspective—writing a letter saying, “Look, the NHS would bloody well love to have defibrillators delivered. Please get on with it”. It is about the ministerial role in providing guidance to regulators so that the system interest as a whole is covered.

Secondly, one thing that has shocked me is how many of the start-up companies we try to help have already had public support. I used to be on the board of UK Research and Innovation (UKRI). Innovate UK is an agency that provides I think £1 billion a year for new technologies and start-ups. So one bit of government is pushing the start-ups out into the world and another bit of government is then providing them with a massive obstacle. It is absurd. We need to make much closer links between regulators and government agencies such as Innovate UK. That is two-way. It is partly so that the regulators understand earlier what is happening in the technology space; it is also, to be frank, because sometimes the innovators need to know what the regulatory constraints are to try to design their new product or service around the real world of regulation. Sometimes the regulatory obstacles are genuine ones, which these start-ups should be aware of, and that is incredibly frustrating.

My third issue, and then I will shut up, is that after you have got through this regulatory regime it would be great if public procurement were much bolder in using services with a tick in the box from a regulator. Especially if you have also been funded by Innovate UK, received public support and been cleared by the regulator, departments should then be at the door of these start-up companies wanting to buy their products and services. The previous Government passed new procurement legislation, and I think that is an opportunity that has not yet been fully used.

Lord Fuller: Is there not something you have just missed? It is not just for the company, the regulator and the initial state funder; it is also giving certainty to those who might put risk capital, private equity or whatever. I was involved through our local council in trying to set up a company that had a really innovative approach to ablating kidney cancer—normally it is burned off or frozen off, and it is hot-cold, hot-cold—but it ran out of money because it took eight years to get the compliance (CE) marking. The business folded and people are less healthy as a result. Sorry, chair, but I do not think the funding route—

Lord Willetts: Oddly enough, some investors—and I do not blame them for this—are themselves quite risk-averse. Take robotics. Milton Keynes City Council, which I visited with Minister Lloyd, is very pro-innovation. Milton Keynes has about the most ambitious use of self-driving vehicles and pavement robots that I have come across. The council will say it has pushed the boundaries on how it interprets the Highway Act, and it also has the advantage—oddly enough, because of the wide roads in Milton

Keynes—of a stretch of private land between the main road and the pedestrian pavement that can be used.

Milton Keynes City Council is a good place to visit if you want to see some interesting innovation. If you are a hard-headed investor who then gets legal advice about whether to invest in the technology that you have observed functioning in Milton Keynes, your lawyers will say, “Oh, but we are not totally clear whether everything that Milton Keynes is doing could be done elsewhere. It all depends on some rather unusual patterns of land ownership and you cannot guarantee”. The venture capital legal advice will be, “The regulatory regime is a bit uncertain, so in the light of that we advise against investing”. Part of what we are also trying to do at the Regulatory Innovation Office is to take an individual enterprising example of a more permissive environment and try to make it reliable and nationwide, because only then do you trigger the big investment.

Baroness Harding of Winscombe: I have a quick follow-up. You are really clear on the value of the ministerial steer and the role of the Minister, yet we also know as fellow politicians how convenient it often is for Ministers to be able to push that responsibility to the regulator. How do you get out of that bind?

Lord Willetts: That is a very fair challenge. That is why I am quite keen on the idea that there are wider benefits here, including often lower risk. The steer letter has to be formulated in such a way that you are not asking British citizens to somehow lead more dangerous lives. You are trying to explain what you are doing as promoting wider benefits from services. It is no accident that the areas where we have been able to make most progress on drones are where there is a public service element. It is blood samples being moved around quickly. That is how you get people comfortable with this. If the drones are whizzing around delivering blood, if you are using ambient AI to help people inspect care homes and keep a record of what they see, if you are using your drones flying beyond visual line of sight to deliver stuff to remote Scottish islands, that is how you spread these technologies. I am a complete realist. That is how you get the benefits across.

Q140 **Lord Barber of Ainsdale:** Much of the focus of this inquiry is about the role of regulation in promoting growth, so much of the discussion has been about speed of decision-making, approval processes, networking of good practice and so on, all hugely important to try to deliver more user-friendly services to people who need to work with the regulators. Another dimension of regulation is effectiveness. This thought was prompted by your reference to the water industry. At the moment there will be big changes in the planning system, which is very important. The rules will change, and regulatory failure can have disastrous consequences. Is that an issue on your radar as an area of responsibility or interest, or is your focus very much more on trying to get the systems working in a much more user-friendly, innovative, creative and more effective way?

Lord Willetts: Accidents do happen; things do go wrong. As we gradually spread the use of self-driving cars and autonomous vehicles—

there is a whole strand of work on autonomy, which is the connection between the drones that we started with and robotics, and the Regulatory Horizons Council has done some work on autonomy—there will be a self-driving car that has a car accident. It will happen. The question is whether they are safer overall. I think that at the moment there are about 1,300 fatalities a year on the roads from cars, so we have to look at the overall picture and compare new technology not with perfection but with the imperfect arrangements we currently use. That is a way of winning the argument. At some point in the future I can imagine a world where humans are banned from driving cars and it is seen as unacceptably risky behaviour. People will be amazed that we ever allowed humans to do it. That is not new regulation I am proposing.

Lord Barber of Ainsdale: I could nominate a number of people who might be appropriate for that.

Lord Willetts: I can see that happening. We are in a transition. These are all part of a transition to a safer, more beneficial world, but there will be individual accidents en route.

The Chair: Everyone knows my hang-up about this. At least automatic cars will not be drinking before they drive.

Q141 **Lord Best:** I am thinking about what you will do next and where your priorities will be for the next instalment of the Regulatory Innovation Office (RIO) story. You draw this distinction in your excellent little booklet on concentrating on the specific problems caused by particular regulations affecting drones, space or whatever it is and your wider role tackling issues in the whole regulatory system. I get the impression from what you have been saying today that these two are not so distinct and that you pick up the lessons from the specifics and apply them more generally to the whole of the regulatory world. Are you dividing the time and efforts of RIO between these two approaches or are you blending them for the future?

Lord Willetts: Ultimately, we do the work that Ministers ask us to do, and Ministers have given us some very clear priorities and just added to them. There are also wider regulatory exercises. The Chancellor and the Business Secretary chair regulatory round tables, and I appreciate that RIO is invited to those. That is an opportunity for us to convey wider messages and above all for Ministers to indicate whether they support the points we are making and to nudge other regulators that we may not have directly been dealing with. Through the Department for Business and Trade's wider role on regulation and partnership in regulatory round tables chaired by Ministers in other departments, we can help spread wider lessons.

Lord Best: On the specifics of the areas that you will cover, you were saying that you now have a couple more areas. Is it robotics and the defence industry?

Lord Willetts: Yes. I see robotics as linked to drones and this wider issue of autonomous systems and what the rules are. We are literally in the first few weeks and really have not got deeply into the substance, but they are connected. Indeed, even in the other area of defence, a very likely starting point will be autonomous subsea and autonomous submersible systems, where there is both civil regulation from the Maritime and Coastguard Agency and military regulation. You can sense that there is a bit of a strand here, because we think there may be connections. Although there are different regulators, some of the technology and links of hardware and software in a robot, a drone and a subsea vehicle are quite similar.

Q142 The Chair: I have a couple of questions arising from what was said and, if you have time, maybe my colleagues will come in afterwards. I have a question about whether you have any worries that if we concentrate too much on minimising—maybe that is not quite the right word—regulation and increasing risk appetite, that carries risks for the consumers, the passengers, the patients, the workforce or the environment. The example that you gave, which had the back of my head going, was that I was on the Financial Services Consumer Panel at the time of the crash and we were left with a lot of people with houses they could not sell for what they bought them for. When you talk about more freedom and that it may be that some consumers pay the penalty, I have worries that the point of regulation might be undermined. Am I overstating that?

Lord Willetts: Yes, that was my example of where there is a trade-off. I was citing what I think were the very wise words of Nikhil Rathi from the Financial Conduct Authority (FCA). Indeed, he has also given them to the Treasury Committee, I think, saying that ultimately it was for Ministers. He challenged the Treasury Committee as well to set the risk appetite.

My personal view is that we have ended up, after the lessons of an underregulated system and the crash of 2008, overregulating. There are young people for whom the cost of a mortgage would be significantly less than the cost of the rent they are paying in private accommodation, but the requirements on the size of the deposit and suchlike are making it hard for them to transfer to home ownership. This is now me personally talking; Regulatory Innovation Office does not get into financial regulation.

It is an example of a decision about the balance of risks and benefits. Overall, I hope you will have sensed that I am an absolute believer that what we are trying to do with regulation is to lower the overall risk exposure of British citizens and spread wider benefits so that their lives are better. I do not blame them for it, but it often frustrates me that because of the way that the regulatory function is discharged, those wider benefits and that wider reduction of risk are not taken into account. I am very sensitive to the point you make. Nikhil Rathi and the FCA are in a slightly different position, but because we are dealing with new technologies there are often significant benefits and reductions in risk.

The Chair: My last question in a way goes on slightly from what

Baroness Harding was saying. You talk quite a lot about a governmental or a ministerial steer or nudge, but could that also undermine the independence of regulators?

Lord Willetts: That is a very fair question. That is where I am influenced by the Cunliffe case. My view is that it is legitimate. First, regulators have to work within the framework of the law, so unless you change the law they have to operate within that framework. Highly specific decisions are for regulators, but signalling that there are wider benefits that you wish them to take into account seems to me a legitimate role for Ministers, especially when you bring together Ministers from other departments because the conversation is so often with the sponsoring department focus. If you are sitting in the Department for Transport, where we have good working relations with the Ministers, they are thinking about airspace. It takes someone else to turn up and say, "Have you thought about delivering defibrillators and looking to what they are doing in Sweden to lower the danger of heart attacks?" That seems to me totally legitimate. I do not think it is an unfair interference with regulators but it does require a wider cross-government perspective.

Q143 **Lord Teverson:** As we have a little bit of time, I am sure you have huge international experience as well so I would be interested in your comments as to where perhaps the UK stands in terms of the spectrum of overregulation or underregulation and maybe any lessons that we have learned. Who does it better?

Lord Willetts: Small countries—Singapore, Estonia—because they do not have domestic incumbents in many of these areas that are a force for protection, and they know they are in the market for attracting internationally mobile capital and companies. They do it well.

At the other end of the extreme are countries with a large amount of space. If you look at drones, Australia has a much more liberal regime but then it has a lot more space for flying them. There is an awful lot going on in America, but the Trump Administration has at least in several areas just tried to set time limits for getting decisions taken more quickly.

This is always a matter of international negotiation. When there are these other good examples, we can do a little bit more mutual recognition. The other thing is to what extent we think our own regulators should make the decisions and operate an elaborate infrastructure for reaching a decision. If there is a country that we trust and with which we have some formal relationship, the Medicines and Healthcare products Regulatory Agency, for example, will say that when it comes to medical devices it has a group of countries with which it is negotiating mutual recognition. If Canada has approved your medical device and we know the Canadian system, do we really need to go back to the beginning and start all over again? Can we not just say, "Well, if you have passed muster in Canada you will probably be okay here"? We can do a bit more to get the benefits when we have a trusting relationship with another country.

Lord Teverson: I think that is a very important comment. It is

something that has come up elsewhere, and I am sure it is something that we could do better. Thank you.

Q144 Baroness Drake: These discussions always lead one on to think about other questions. The focus today is on operational efficiency and a more considered approach to balancing benefit and risk in regulation, but some of the biggest regulatory failures are because they did not see emerging risk and they were too preoccupied with their prescriptive regulation. A classic example was 2009, with a huge emerging risk across the world and lots of people did not see it. How do you build being more efficient in seeing emerging risk into your approach?

Lord Willetts: I should say that, having strayed into Financial Conduct Authority (FCA) territory, the Regulatory Innovation Office (RIO) works in our four priority areas. I was giving that because I had been at a Resolution conference where the FCA spoke this morning.

One of the ways we can help the regulators is that there are various technology foresight exercises. Part of the logic of being located in the Department for Science, Innovation and Technology (DSIT) is that that is where the Government's knowledge of what is happening in new technologies is concentrated. It is literally about just bringing some start-ups into meetings to describe to regulators some of the things they are trying to do, which is both a risk and an opportunity.

Let me try to give a good example, which is the Human Fertilisation and Embryology Authority (HFEA). One of the reasons why the UK has a very strong life sciences industry and a leading biotech is that we have a trusted regulator in the authority (HFEA). The legislation setting up the authority and setting its framework goes back to about 1990. I have been to events hosted by groups such as, Nuffield Council on Bioethics, where the technologists and the regulators talk about where the technology is going. If we want to carry on with HFEA being probably the most globally respected regulator, it needs to know what is happening about, for example, whether you can create a quasi-embryo not from a fertilised egg but from a stem cell and what that means down the track, whether that entity is to be regarded as an embryo and what the regulatory regime should be for it. The researchers often want to be located within a responsible regulatory regime. They need to know there is a regulatory framework that is taking account of a new technology. We can help with foresight work so that we try to avoid the risks of something happening that is outside any regulatory framework.

Baroness Drake: Is that a structured part of your thinking or is it occasionally that it comes up depending on the area of regulation?

Lord Willetts: We do have limited capacity, but we have this AI for healthcare priority and our partner body, the Regulatory Horizons Council (RHC), helps us keep an eye on it. I should mention the RHC, because we are quite operational and the RHC does more long-term thinking. I think I cite the example in the pamphlet. It was very early into nuclear fusion, and authoritatively explained how nuclear fusion was not the same as

fission and should be regulated separately. That is a big prize, and we got that because of the RHC's work. It was very early into quantum. It has now finally been turning to the long-standing problem of at what point software becomes a medical device. There is a grey area—are you just using AI as a summative tool, or in reality are you using it for medical decision-taking?—which an exercise led by Alastair Denniston is looking at. Some of the more horizon-scanning work is done by the RHC and it is very helpful.

The Chair: Thank you. I think that I can probably say on behalf of the whole committee that we found that a fascinating hour. Thank you very much, Lord Willetts, for your input, which I think will be very important as we begin to write our report. That ends this session.