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Foreign Affairs Committee

Oral evidence: Tech and the future of UK foreign policy, HC 201

Tuesday 1 March 2022

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Members present: Tom Tugendhat (Chair); Alicia Kearns; Stewart Malcolm McDonald; Royston Smith; Henry Smith.

Questions 231-265

Witnesses

I: Rt Hon Amanda Milling, Minister of State for Asia at Foreign, Commonwealth and Development Office; Professor Charlotte Watts, Chief Scientific Adviser and Director for Research and Evidence at Foreign, Commonwealth and Development Office; and Chris Jones, Director of Delivery and Analysis at Foreign, Commonwealth and Development Office.



Examination of witnesses

Witnesses: Rt Hon Amanda Milling, Professor Charlotte Watts and Chris Jones.

Q231 **Chair:** Good afternoon and welcome to this sitting of the Foreign Affairs Committee. Minister Amanda Milling is with us this afternoon. Minister, would you like to introduce your colleagues?

Amanda Milling: Absolutely, thank you, Chair. To my left is Professor Charlotte Watts, the FCDO's Chief Scientific Adviser and Director for Research and Evidence. To my right, I have Chris Jones, who is Director of Delivery and Analysis.

Q232 **Chair:** We have witnessed over many years, but substantially in recent days, the growing influence of multinational tech companies and the way in which they are changing the organisation of the world. What meaningful thinking has the FCDO done on this and what should we be aware of and looking out for?

Amanda Milling: I thank the Committee for its time this afternoon, for conducting this inquiry on tech and for the opportunity to go into some of the details. I think I am right that you launched this inquiry around this time last year, just before or around the time when the integrated review was published. I want to frame this discussion within the integrated review, because that is a good starting point.

The integrated review pulled together foreign policy, defence, security, trade and science and technology. As much as anything, that was a recognition that technology is advancing at pace and is playing its part in geopolitics, international security and international policy. It is key to gaining economic, political and security advantages. Hopefully, we will come on to talk about some of the opportunities, as well as the challenges, that tech provides and the role the FCDO is playing.

To build on the integrated review, you will recall that the Foreign Secretary talked in her Chatham House speech about networks of liberty. The FCDO plays a role in working with our friends and allies, with much closer co-operation on technology. I hope we will also come on to talk about how we work with colleagues across other Departments who are responsible for domestic policy and our role in the FCDO in augmenting that internationally—as I say, working with our international allies and partners.

One other point regarding our approach to international engagement is that it is multifaceted. We can talk about how we do this in multilateral forums as well as bilaterally. Last year, the Prime Minister set out that he wanted the UK to become a science and technology superpower by 2030. We now have a national science and tech council, which he chairs and on which the Foreign Secretary sits.



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The FCDO plays a host of different roles in this space, building on the work across Government, but working across posts and with our international allies.

Q233 Chair: Thank you very much. Presumably, all that work you described will bring us to a point at which these tech companies will be increasingly part of our diplomacy, in the sense that they are engaged with us and we are engaging with them to shape the world as we would hope it to become. How is that co-operation going?

Amanda Milling: First and foremost, we recognise the importance of these tech companies and engagement with them, both here in the UK but also internationally. As you will be aware, we now have a tech envoy in the US, who has the key role of engaging with tech companies. Heads of missions and our experts across the network engage with tech companies and businesses across posts.

I would add that across all the international organisations, including the UN, the WTO, the G7, the OECD, the G20—I could list them off—technology is a key priority. When we had the presidency of the G7 last year, we hosted the Future Tech Forum in December, and that was attended by the multinational tech companies—for instance, I held meetings with Microsoft. We do engage and it is a responsibility of not only the tech envoy but officials, Ministers and heads of mission.

Q234 Chair: Can I push you on that? Tech is no longer a distinct element of work: it applies to everything. How are you making sure that this is something every directorate and every embassy is also doing, so that it is not just the tech envoy and the Tech Minister, but everybody?

Amanda Milling: If you go back to the integrated review, it demonstrates the point that science and technology is going to be at the heart of our international relationships. A key part of the role of our heads of mission is to ensure they are engaging on this, as well as those experts in post. We have experts across the network across the different regions who are engaged in this area.

I would also add that ministerial visits include an element of science and technology. For instance, when I went to Norway and Sweden at the end of last year, it was a key area. This is a key topic for many of our ministerial visits and also for visits by Ministers from other Departments. By definition, for our heads of mission and our diplomats, this is a priority, and a key priority in many of our bilateral relationships. Charlotte will pick up on this.

Professor Charlotte Watts: When you think about the importance of tech, it is also about the breadth of tech areas. It is very easy to think about tech in terms of Facebook or Meta but, just coming out of the covid pandemic, for example, it is also important that we are working closely with small and large biotech companies and pharma as well, so the breadth of the engagement is quite extensive across different sectors that are important to us.



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Amanda Milling: Your inquiry is really important—we look forward to your views; I know you have been taking a lot of evidence on this subject—and also quite timely, because the Government will shortly be publishing an international tech strategy, building on the integrated review and our vision for a network of liberty. We will be setting out our position on both critical and emerging technology, building on the vision of being proactive, positive, patriotic and ambitious. From our point of view, your inquiry is timely in terms of your feedback and the Committee’s view on where you think we are getting it right and where we can do more.

Q235 **Chair:** Okay. Thanks for that.

It would be useful to know what challenges you are facing. This is actually a relatively new area for the FCDO. What are the areas where you are facing particular challenge? Where isn’t it working as well as you hoped? There must be many areas where you thought this tech envoy would get it or that embassy would be able to deal with an issue and you find, on the basis not of an individual but of a structure or an outreach programme, that either they do not want to play with the UK Government or we do not integrate well with them. Where are the areas where you are finding challenge?

Amanda Milling: I will turn to Chris in a moment. One of the things I would like to say is that you are right to say that this is a relatively new focus, but don’t underestimate the level of expertise that sits within the FCDO and the network. Also, I think that bringing the two Departments together has enabled us to really build on that expertise and ensure that we are getting into the details of some fast-moving technologies. We are looking to build our capacity so that we can continue to deepen our knowledge. Chris, do you want to pick up a little more here?

Chris Jones: Thank you, Minister. To pull out two areas where it is going less well than we would hope, the first is in prioritising scant resource across Government. Across the whole of the UK Government, we have limited tech and science expertise. It is about applying that in the areas where we think we have the greatest need. That also talks to the role of the FCDO. While we are an internationally focused Department, our role is to harness the whole of the domestic Government picture, and very rarely do we own that policy. We are presenting and amplifying that policy internationally. It would be fair to say that often we find that a struggle, as is making sure we have access to the right people in enough numbers to be able to do these things.

Amanda Milling: I would like to build on one point, because we have talked about this at length as well: we have individuals who have genuine expertise. I have two of them by my side right now who have that deepened knowledge and expertise from a technology and a science perspective. As we recruit, we recruit people who have tech or science backgrounds, so not necessarily the traditional career diplomat.

Professor Charlotte Watts: If it is okay, I wish to speak a bit more about the issue of cross-Whitehall working and capability. I am a chief



scientific adviser: I am one of the network of chief scientific advisers across all of Whitehall. We meet weekly and now, with the new governance structures around science and tech, we meet the NSTC as well. There are a lot of strategic conversations happening not only at a policy level but across CSAs to really think through where the opportunities are and how we mobilise the resource and technical capability across the CSA network in each of our teams, and also to identify those areas where we want to grow new capabilities.

In terms of FCDO's particular capability, I head quite a large directorate. To give you a feel of its kind of expertise, we have research analysts who have deep geographic knowledge, but they also include experts who are very familiar with different aspects of emerging tech and who combine that with geopolitical analysis to think about the implications of different aspects of tech development. We also have our SIN, which we run jointly with BEIS and has 200 staff across 40 posts. We are looking now at how we deploy them to make sure that we have the right capability in the right place to support delivery on the IR.

We also have a range of deep experts in sectors, coming from the ex-DFID side, and that includes experts in statistics, health and climate science. If I add that up, that is essentially hundreds of years of technical expertise that we now have within the Department. Clearly, there are new areas where we can develop further, but we have quite strong expertise to build on and I think we are building from a position of strength.

Amanda Milling: This also goes to the point of recruiting a tech envoy. There are others, for example Denmark and Australia, who have tech envoys, but that demonstrates that it is an area of real importance. To go back to one of your earlier points, Chair, it relates to the need to engage with the sector and to understand the sector.

Chair: We will come back to the tech envoy in a little bit, because we will be interested in the comparison—namely, why did you set up your tech envoy like this and not like the Danes and the Australians, and what do you think is working, what is not, and what lessons do you think we can draw on? We will come to that.

Q236 **Henry Smith:** Thank you for being with us, Minister, and your officials. How concerned is the FCDO about increasing Chinese and Russian technological co-operation—for example, their recent statements at the Beijing winter Olympic games about internationalised internet governance? What are the FCDO's plans to counter that?

Amanda Milling: That comes back to one of the fundamental points about technology. There are opportunities as well as challenges and issues that come with that. There are those who will use technology in a good way, and those who will use it in a way that undermines our values and principles. We need to understand where the latter is happening and we need to be prepared to call it out.

The other point this turns on is the role of the UK in the international arena, in terms of regulatory diplomacy and developing and shaping



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international rules and norms. The UK is a credible voice: we have very strong values that underpin our point of view when it comes to technology and the advancement of technology, and in particular emerging technologies.

Chris Jones: Could I just add something on the international technology strategy? The point of this strategy is to set out the values that the UK and a network of partners want to see embedded in a technological sphere. By definition, that means there will be some who do not agree with it, but the point of that strategy is to set out the world we would like to see enabled by technology and ensure that is the model we pursue alongside our network capability.

Q237 **Alicia Kearns:** I have a quick question about that: how much are we effectively implementing AI into our atrocity-prevention thinking? How much are we incorporating AI into the core business of the Foreign Office, which is protecting British nationals abroad, atrocity prevention and so on?

Chris Jones: Like many Departments, we are looking at how we use artificial intelligence and other deep technologies to support our business, both across diplomacy and development. Charlotte may talk in a minute about where we have applied artificial intelligence to the diplomacy space. We are looking at a number of different ways we can use it: I cannot comment on specifics, particularly around atrocities, but we have certainly looked at how we can apply it to consular cases—how we can make sure we are targeting our scant resource into the right places as quickly as possible. We have also done a number of pieces of work around how we identify significant networks of influence and make sure we can use those to further our diplomacy cause.

Q238 **Alicia Kearns:** Charlotte, do you want to come in on this?

Professor Charlotte Watts: Yes, when we think about the applications and opportunities of AI across the FCDO's work, it is around security and managing and addressing risk. It is also thinking about the opportunities of AI, such as in our development investments, and particularly in some of the development research that my teams lead. We are also thinking about how, for example, we use AI to speed up our resource to humanitarian crises and situations of emergency—using our AI to help get the right information to rural populations, such as farmers, about what is happening with the weather or the latest pest disease, to improve decision making in other aspects of development policy. The breadth of our thinking on AI is very broad, particularly as the FCDO.

Q239 **Alicia Kearns:** I used to work at the Foreign Office, and we used data and tech in things like managing the internet to go, "Right, it looks like there is going to be a protest in Iran outside our embassy, because everyone is talking about going to McDonalds and we know there is not a McDonalds, so they are talking about us." However, there was no sense of tech or AI reaching beyond individual units that might be working on it, so how confident are you that the work that is being done by those



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specialists who are sat here on tech and AI is meaningfully being drawn in? For example, have you had any requests from any of the teams working on Ukraine right now for you to surge in and give them support? Did you surge in the Afghanistan crisis? I am trying to understand how siloed it is.

Chris Jones: I have a team of data specialists who are embedded in that Ukraine crisis right now. They did the same in Afghanistan, and they will continue to do so in every piece of high-priority work we have in the future.

Q240 **Alicia Kearns:** Sorry, is that just on the consular side that you mentioned there, or is it, for example, gaming and planning what could work? “If we were to do a no-fly zone, how many”—

Chris Jones: It is across a range of activity, from things like economic analysis all the way through to consular support.

Q241 **Henry Smith:** What measures are the FCDO taking to engage with countries in the global south, where there is perhaps less developed, open, democratic internet—maybe even some resistance to it—and what is the FCDO doing to encourage greater alignment with our own UK values in that area?

Amanda Milling: This is one of the key points about our approach when it comes to the international tech strategy: how we engage globally on this and ensure that the values that we really hold dear apply globally. The same is true in terms of international norms and the standards set internationally. I also think the same applies in terms of regulatory diplomacy. To return to one of my earlier points, we talk an awful lot about digital and technology in bilateral meetings so that we can ensure that where technology is being adopted, we are influencing its use for the good.

Q242 **Henry Smith:** If I may ask a quick supplementary, to be a bit more specific, concerns have been raised recently about Mauritius, which has introduced legislation that makes it illegal to criticise Mauritian sovereignty claims over the Chagos islands. Are you concerned about that sort of development? What is the FCDO doing about that? Does the Department detect some malign Chinese playbook influences on smaller countries, to seek to influence them away from, shall we say, the democratic approach that the UK takes?

Amanda Milling: To take your second question first, I think that is why in our engagement, we amplify our values and our policies, to explain some of the issues and challenges that come with those technologies. Alongside your first question, we develop domestic policies that align with our values, which then enable us to amplify that on the global stage. When we are talking about technology and legislation, that is underpinned by what we are doing here in the UK and by our values.

Q243 **Henry Smith:** Do any of your officials have anything to add?



Professor Charlotte Watts: In terms of our work with developing countries, through our development activities we have had a range of investments over many years to support the development of digital capability. We have a long history of working with different Governments, and increasingly part of that approach is how we use our expertise and our analysis to strengthen partners' ability to think about the pros and cons of different options that they may be offered, and to understand the risks as well as potentially what might be initially attractive in any particular offer. We very much draw on the UK expertise in data and cyber. In a number of countries across sub-Saharan Africa, our development programmes are explicitly including aspects to do with cyber security as well as other aspects in terms of strengthening digital capability.

Q244 **Stewart Malcolm McDonald:** Minister, in terms of the international picture of setting rules and standards, obviously you have the big players of the US, China, and, on our doorstep, the European Union—it is important to remember that it is still very close geographically and in terms of other interests. Some would suggest that the UK is not a big or serious player in that. I am not suggesting that, by the way; I think that there is definitely a role for you to play, but where do you see the UK fitting in that context?

Amanda Milling: That is a really important point, because when we look at technology, we have to be realistic. A lot of these technologies are advancing at pace. In some areas, we are leaders; we have the expertise to lead the way. There are other areas where our partners are more advanced and leading the development. Our role is to ensure that we work on the international stage where we are leading with our partners, but then collaborate where we don't necessarily lead in any particular area. It's a multifaceted approach.

Also, what I would say, just touching on an earlier point, is that all these different organisations, relating to digital and technology and science—these are key priorities, so it's a question of working within those to be able to shape the governance and shape the regulations. Going back to the earlier point, we want this to be underpinned by our values. We recognise that we are not experts or leaders in each area, but we have a role to play.

Chris Jones: Can I just extend that? The Minister's first point was on maturity of technology, and there is a real case to be looked at about the point at which regulation and standards make sense. If you try to regulate too early and set standards too early, you encourage some poor behaviours and potentially force that technology, and people who want to exploit that technology, into the wrong space. As the UK working with our partners, we need to look at the right point in those technologies' maturity cycle at which to engage.

I think the second point the Minister was making was that we don't need to do all of this alone, and neither should we try. Where our partners are doing things with which we agree or with which we think we can agree with some tweaks, that is the path that we should be taking. There will

also be some areas where we genuinely do lead the world, and those will be the ones where we stand up and bring our network of liberty with us.

Q245 **Stewart Malcolm McDonald:** So what are they?

Chris Jones: We would say we are particularly leading in the quantum space. Again, that is one of those areas where the market is quite immature, so it's emerging. It will be some years before it comes to fruition, so we need to be careful about what regulations we put in place at which point.

We are particularly mature in some of the R&D spaces, which Charlotte may want to cover, but again, when we are looking at the research and development space, we need to be really clear about what we are regulating against, how we engage with the academic world and how we engage with the research and development institutes to give them the support they need to make the breakthroughs, but also give them the protections they need to make sure we don't leak IP and compromise our national security.

Professor Charlotte Watts: Just to come in on other areas, the UK is very strong on AI and different aspects of AI. The Turing Institute, for example, supports a world-leading strong network of UK universities doing research in a range of aspects of that, from the ethics through to different applications. Engineering biology is another area of strength for the UK. Also we have, through the MHRA, very strong regulatory capacity that others respect. So those areas are ones where people look to us and try to understand what our thinking is, and where we can have opportunities to influence and work with others.

Q246 **Stewart Malcolm McDonald:** So in terms of where we are learning, where we are collaborating, and where others are taking the lead, what are those areas and who are those countries?

Chris Jones: There are a couple of areas that I would point to initially. I will say that the Departments take the lead in these spaces, so I don't want to talk for them. But in the area of data regulation, there are different regimes and some would say that the EU's GDPR system has some particular strengths and we need to be looking at how we engage with that, how we use that. Then there is the US and the EU's view on telecoms. Again, we have quite a mature view in the UK, but how do we ensure that we work with the relevant regimes and the relevant countries around the world to make sure that that, rather than an alternative, becomes the global standard?

Professor Charlotte Watts: In terms of our thinking about the countries that we want to work with, we clearly want to work with established science powers around the world. Often, those collaborations will be very broad based, around a range of different sectors. In other areas, there might be more specialised expertise and capabilities that we want to partner with in some of the emerging science powers. That is part of the importance in the Indo-Pacific tilt; partnering not only with the established science powers in that region, but with some of the areas that have



particular areas of expertise that are very complementary to our own and where there are real opportunities of collaborating closely together.

Amanda Milling: To pick up on the point about who we are partnering with, if you look over the course of the last 12 months, I can probably point to a number of different partnerships that we have agreed. You have got the UK-US landmark bilateral technology partnership. You have got a new critical technology partnership with Australia. The Indonesian road map is another one where there is a strong technology piece. Another area is ASEAN—as the Minister for Asia, some of these are particularly important to me—where we have got the UK-ASEAN digital innovation partnership. You can see there are a number of broad-ranging partnerships, and we will continue to build on these.

Q247 **Stewart Malcolm McDonald:** All those examples are doubtless exciting and innovative. None of them are with the European Union. I am not getting into a Brexit discussion—

Royston Smith: Go on.

Stewart Malcolm McDonald: I can if you like, but it remains a fact that we have long-standing relationships with a major bloc on our doorstep, who write rules, who are setting standards and who are innovating at pace. Talk to me about those collaborations and convince me that, even with the Indo-Pacific tilt—forget what we think of that—we are not ignoring the big, important bloc right on our doorstep.

Amanda Milling: One thing I would say is that the Indo-Pacific tilt is not at the expense of our near neighbours. We do need to recognise, as was recognised in the integrated review, that this is a huge opportunity for us. We do continue to engage with the EU. I don't know if Chris or Charlotte would like to come in on that.

Professor Charlotte Watts: I think we can both talk to this, but I thought I might come in on the research and science collaboration side. You are absolutely right; a number of countries in Europe are very strong scientifically. They are important partners for us, and that is why the UK has committed to being part of Horizon Europe. That has been a very successful vehicle to support scientific collaboration over many years, and the UK has been a net winner from that collaborative funding because of our science progress. We are very keen to move forward with that and we are urging the Commission to make progress with that, because we recognise how important those collaborations are.

Q248 **Stewart Malcolm McDonald:** Talk to me about the relationship that the Foreign Office has with the Science and Innovation Network. How does that help to set your thinking? What influence does it have?

Amanda Milling: We could all have a go at that.

Chris Jones: The reason why we are looking at each other is that we have joint responsibility for it. I used to run it, and Charlotte has just taken it over. It is about 200 people around the world, and it is a pretty significant collaboration between the FCDO and BEIS, in terms of how we



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provide that capability. It does great stuff. I think it is one of the most comprehensive S&T networks of any diplomatic and development service in the world. It really helps us gather information on what is going on in different countries. Just as an example of that, during the covid crisis the FCDO, as you would expect, was responsible for all the international covid analysis. That drew on the SIN. All the information came through our SIN offices, and we would not have been able to do the things and provide the intelligence we did without them. Charlotte, do you want to come in on that?

Professor Charlotte Watts: Perhaps I can talk about looking forward with SIN. As Chris said, it is an amazing network. It is really strong, and I think it is relatively unique that we have such a widespread footprint of science and innovation advisers at post. We will continue to develop that. It is likely that we will strengthen the focus on technology to support the international tech strategy that the Minister has described. We will also be seeking to ensure that we have got the right capability in the right place to respond to the needs and particular priority partnerships that we might want to draw, because part of the SIN role is to amplify the UK's strengths, but also to support the partnerships that we want to move forward with.

Stewart Malcolm McDonald: I will not ask you to tell me right now, but perhaps you could write to the Committee giving us a breakdown of where those people are based around the world. Who knows? Maybe there are more on the European continent than I think.

Q249 **Alicia Kearns:** I have a quick follow-up question. On investment in quantum and AI, it would be really helpful if you could help me to grasp the predicted impact of new tech. If we took the emerging technologies that we are talking about—quantum and things like that—to their full extreme, cracked them open and embraced their full possibilities and opportunities, what does that actually look like for us as foreign affairs practitioners? What does it look like in terms of atrocity prevention and conflict in general? I can understand how data and information can inform, but talk me through what the maximum dream achievement and opportunity from that sort of tech would be in the future.

Amanda Milling: I just want to pick up on something. For something like quantum, we also need to be realistic: it could take some time—

Alicia Kearns: I am talking about in 50 years' time.

Amanda Milling: Yes. On the applications, we will have a much better idea once it has all been developed, but we know that it could possibly be a game changer, in terms of both the opportunities and how it can be used for good, and the massive risks that come with it as well. I suppose that is how it really influences us in the Foreign Office, because it goes back to those international rules and norms. Also, to Chris's point, the difficulty you have with some of those technologies is in regulation. You cannot regulate before you know what they can do. That could undermine and have unintended consequences.



Q250 **Alicia Kearns:** Absolutely—that is the question: what could they do? How will that arm and protect us in the future?

Chris Jones: Let me start. I think 50 years is probably the right timeline to be looking at because those technologies will take a while to come to fruition. Even between the experts, there is significant disagreement about how long that could be—it could be 20 years; it could be 100 years. I think what that means is that there will be plenty of prizes and plenty of developments along the way, and perhaps looking at the 50-year timeline is less useful than looking at the five, 10, or 20-year timeline.

If I talk to my colleagues, particularly those who have been in the diplomatic service for a while, many of them would look and be quite scared about what they think the impact of something like artificial intelligence may be. But my view, and the view that we are hoping to convince people is true, is that the technologies will be a real tool for supporting people and will help them to do things that they cannot do at the moment.

Artificial intelligence, for example, is great at churning through huge amounts of information and coming out with intelligent conclusions. That is something that, broadly, we have to do manually at the moment for things such as analysing our relationships, seeing what works, looking at voting patterns and how we can influence those things. Artificial intelligence and machine learning have the capability to do that much, much quicker for us, and help equip our diplomats to go and have conversations sooner, faster and better.

Quantum is less likely to have a direct impact on how the service operates. I think it will fundamentally change the way that many things are done around the world. In Charlotte's world, you will make a step change in the ability to do research and to develop drugs quicker. That will of course have knock-on impacts in the work that a foreign service will have to do.

I think they will also have significant implications for the national security world, particularly in cyber-security and how we respond to that. That is, I think, why the Minister was talking about regulating at the right point to ensure that we try to insulate against the risks of some of those things happening. The particular scenario that everybody is no doubt familiar with is that as soon as somebody has a fully functional quantum computer, all current encryption becomes invalid because it can be broken by brute force. We need to be very alive to that happening and work out how we respond to that to protect the way that the UK operates.

Professor Charlotte Watts: If you don't mind, I will come in on quantum computing. This is a journey, and it is changing very quickly. Quantum computing fundamentally is a different way of making calculations. We already have quantum computers that can make calculations phenomenally quickly—far more than through our conventional computing systems—and over time that ability to make calculations at pace will



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increase. That, in combination with AI, will mean that we can do very complex analysis, analyse complex sets of data, more and more rapidly.

In 10, 15, 20 years, we could be at the point where this poses a profound threat in terms of the ability to undermine core security areas. That is why it is really important that we develop and continue to invest in our quantum science and that we collaborate with others who are leading in those areas. In the development of quantum, there is a lot of thinking about quantum preparedness and quantum capability, so that we are looking forward to what those eventualities might look like and what actions we might need to take to address that.

On the other side, there are a lot of important business and new service opportunities in that process of developing quantum computing—links to trade and new areas of economic growth which the UK will want to take advantage of.

Chris Jones: I think we need to be careful not to place too much on the negative side of the ledger. There are many different opportunities in this. I would say that one of the areas where this can really help the business of development and diplomacy is modelling—modelling particular situations. In Charlotte’s world, that is modelling extreme weather or mass migrations, looking at how those things are likely to happen, and therefore how we can react before it is too late, particularly to humanitarian crises. If we can see mass movements of people, we can make sure that we target aid in the right places. We can also use that to model situations of uprising and conflict. We can start to monitor things like social media and bring together different sets of information at scale to look for the indicators that something is about to happen.

Q251 **Alicia Kearns:** I guess the challenge of that will be that ultimately foreign affairs and diplomacy is all about individual psychology and individuals’ behaviour and actions, and while you might look at the voting patterns in a country, they can be determined by reactions to other things. It will be fascinating to see how you maintain that human component in the analysis if you are doing such mass data scraping.

Professor Charlotte Watts: It is interesting. I was in a meeting a couple of weeks ago discussing those very issues. We were working with a number of partners through our research investments, thinking about what the applications were of different types of analysis and combining satellite data with AI and others, but also how to combine that with information from the ground in order to understand what is happening to people, what the politics are and what discussions are happening. Ultimately, to be most effective, it is likely that we will need to combine the kind of data and analysis we can do through these new technologies with some of the stuff we have been doing for a long time. That sort of combination will give us the richness of advice that we need.

Amanda Milling: Hopefully, this also demonstrates that we are having extensive discussions about these different technologies, what the opportunities are and the interaction, but where the fractures are too. In



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preparing for the Committee, we had a lot of hypothetical debates about the implications of various technologies. You can be assured that we have the expertise, which we are drawing on, to understand this in detail.

Q252 Royston Smith: Regarding the current tech envoy to Silicon Valley, is there a plan to expand the envoy's role or extend it to other countries?

Amanda Milling: It is important to say first that the tech envoy is a relatively new role and an important role. This goes back to the Chair's first question about how we engage not only with other Governments but with business. I believe that the tech envoy has provided evidence to the Committee as part of the inquiry.

The role will develop over time. It is fair to say that within our international technology strategy, we will be looking at the policy challenges we face and how we respond to them and what roles are needed. We will continue to keep under review how best we can leverage the different roles in different places to deal with the issues we face as a Department.

Q253 Royston Smith: So there are no current plans to expand the role?

Amanda Milling: I do not know how long the current envoy has been in place. We need to take the time to look at the role, to ensure that it is working and see how we might enhance and evolve it.

Chris Jones: As you will have seen in the evidence you took from tech envoys, there are different models and different things to be learned from them. One of the things we are doing is looking at that evidence along with you and working out what we think the right model is for the UK. We have taken a particular approach to embed a tech envoy in a particular geography, because it happens to be where there is a cluster of tech expertise. There is an alternative model, whereby rather than put it in a particular geography, you have a set of roaming roles around the world. We need to look at the evidence to see what works before we commit to a model, but I think the Minister will agree that we see this as an important place to build our capability and capacity. As the FCDO engages more on science and tech, we need to be very clear about how we do that through roles such as the tech envoy.

Amanda Milling: It is also a demonstration of how we are bringing that specific expertise to the Department and building on those relationships with the big tech companies.

Q254 Royston Smith: The previous Foreign Secretary committed £22 million last year for capacity building in vulnerable countries. What progress has been made under the new Foreign Secretary?

Amanda Milling: Can you elaborate a bit further?

Royston Smith: What has the new Foreign Secretary been doing to help vulnerable countries with their own cyber-capabilities?



Amanda Milling: We have expertise in this area, and I know we have many bilateral discussions with countries about how we can support cyber-security. What sits beneath that is the fact that this is a critical area of real risk. We have many discussions and relationships with countries to protect cyber-security.

Q255 **Royston Smith:** Is helping vulnerable countries with their cyber-security a priority for the Foreign Office?

Chris Jones: If I may look forward again to a different strategy, the international development strategy, which we will publish shortly—I think it is due by the end of March—will set out the role the FCDO plays in helping countries to develop resilience and a range of capabilities, one of which will almost certainly be cyber. That draws on the fact that the UK is a world leader in cyber and we need to make sure that we are providing our expertise and advice to countries that do not have that capability.

Q256 **Chair:** Thank you very much. Ms Watts, I want to talk about your role, how it has changed and how you work with the cross-Government element. As chief scientific adviser working in the science bracket, how do you interact so that the FCDO is as plugged in as it should be?

Professor Charlotte Watts: It is a huge privilege to be the chief scientist for FCDO. I have quite a central role in the Department in terms of the breadth of responsibilities I lead on and the levels of engagement. I lead everything from oversight of the different areas of expertise that I outlined, including the science and innovation network, to providing science advice and analysis at the highest level. ExCo is part of the senior leadership in the FCDO. I am also able to input—basically, stick my nose in—and support as and where that is needed.

The climate is an area where, as chief scientist, I am able to fulfil what is expected of me in terms of providing challenge, supporting the use of evidence and ensuring that we are developing the right capabilities as a Department. For example, with covid, I have been providing weekly briefings to the senior leadership and to heads of mission. There is a very strong relationship between the discussions that I am having along with other scientists at SAGE and feeding that back to FCDO to ask what it means in terms of our borders, in consular, protecting our staff and development investments. That is very much across the breadth of the activities that FCDO implements and leads. As a scientist, I am engaged with and inputting expert advice into those sorts of very live discussions.

Q257 **Chair:** Excellent—that is very helpful. Have you noticed an increase in demand on your time since the integrated review was published? Or perhaps that is a question for Chris, as he did the job before you.

Professor Charlotte Watts: Yes, it is interesting. I have had a huge amount of interest across the breadth of the FCDO. The integrated review has helped with that, although I would not say it is only that. I think it just reflects the Department's understanding about the importance of science and tech. I have been having discussions with both regional leads and heads of mission on what the integrated review means. Clearly, there are



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also quite live discussions in relation to the development of the science and tech strategy, and also about how we take that forward. So, yes, there have been very high levels of interest across a range of different science areas.

Amanda Milling: I think it is fair to say as well that there has been a high level of interest as we have brought the two Departments together, and the value-add that that provides, particularly in terms of your role, Charlotte.

Q258 **Chair:** Excellent. Clearly, one of the elements that you have touched on—and here I declare a slight interest on the grounds that I have invested in a company that has an interest in quantum computing—is breaking spyware. I have to be straight up—the company does not do anything to do with breaking crypto; it is a tangential connection. The defence of privacy and the prevention of spyware is clearly an element that is becoming increasingly important. We have spoken in the past on this Committee about various different sites, whether that is Shein or TikTok, which have connections to state activity, or more correctly—forgive me—have had connections to state activity in their early days. In terms of working out how that spyware or that connection could be used against British citizens, how do you work with tech companies to make sure that their activities, not only in the UK but among our allies, do not breach those human rights standards?

Amanda Milling: To take a step back on this, it goes back to the broader point about how we want technology to be used in a way that aligns with our values and does not undermine human rights. Our approach is twofold. First, we work on the international scene to ensure that the international norms reflect our values. But it also goes back to our engagement with tech companies. We know that some forms of technology that have been used do not align with our values—surveillance technology, for instance. We do call that out. There are times when human rights violations have occurred when we are prepared to have those conversations and call that out.

Chair: Excellent.

Q259 **Alicia Kearns:** This is a very quick one. Given the current tensions with Russia, we have a decent amount of dependency on Russia for certain technologies and for raw materials that we require for them. What are your concerns about how the current situation will impact on our supply chains or internet access and our ability to get the raw materials that we need were they to retaliate to sanctions in some way and restrict our access to those products? Have you taken into account acts such as, for example, cutting undersea cables and so on?

Amanda Milling: In terms of the situation with Russia at the moment, as you well know, it is a fast-moving situation. One of the things we are always doing is looking at how we ensure we have resilient supply chains—I think that would be my key point on that.



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Chris Jones: In any event like this, there is always a whole-of-Government effort to look at the risks that may materialise and to work out how we mitigate those. The FCDO play their role in that, particularly looking at the international context, and we work with a range of different Departments with different sets of expertise to help address those risks.

Professor Charlotte Watts: Just to add, as Chris said, there is quite extensive analysis ongoing to think about the breadth of implications. I feel like we can't really go into that much detail on some aspects of those, but we are bringing our analytic capability to a whole range of issues.

Q260 **Stewart Malcolm McDonald:** Minister, on consular services, which are another part of your brief, could you talk about efforts in Ukraine just now? There are obviously some British nationals still there. I have a constituent there, who is in Kharkiv and who is now struggling to get anywhere. Could you give the Committee an update on efforts to help those who are stuck there and cannot get out?

Amanda Milling: One of the points I would make is that this has been a situation that we have been working on for some time. You will have noticed that the travel advice, over the course of the last few weeks, has been updated. We have been reaching out to British nationals who are looking to leave Ukraine. We had that before the events of the last week. We continue to do that. If you have a specific case, please do get in contact. There is a lot of work being done through our consular services. We have the crisis centre up and running to support British nationals who are looking to leave Ukraine.

Q261 **Stewart Malcolm McDonald:** I do have a specific case. I do not want to air it here.

Amanda Milling: I will pick it up with you after the Committee, if that is all right with you.

Stewart Malcolm McDonald: Yes. It would be unfair to air it here and to ambush you with it, but it is quite an urgent one, and I would like to briefly talk about it after the Committee.

Amanda Milling: Absolutely. I am happy to do so.

Q262 **Chair:** I have a number of cases; I believe that other members of the Committee do, and I am sure that other Members of the House do. Will you be setting up a hotline?

Amanda Milling: I think we actually already have a hotline. The crisis centre is already set up. We will make sure that all details are circulated. I know that this is of great importance to colleagues, on the basis that we have constituents we are looking to support.

Q263 **Chair:** The last point I was going to ask about was that, in terms of the consular assistance you are offering, I know you have sent members of the Foreign Office to Poland to provide support there. Have you sent anybody to Romania or Turkey as well? I have heard reports that some people are leaving Ukraine using other routes.



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Amanda Milling: Can I follow up with the Committee afterwards?

Chair: Of course you can. Absolutely.

Amanda Milling: Then I can tell you exactly where different people are.

Q264 **Alicia Kearns:** Just a brief question: as chair of the all-party parliamentary group on the Turks and Caicos Islands, I know that overseas territories falls into your patch. For months we have been seeing increased immigration flows from Haiti and the Dominican Republic, which is increasing drugs and weapons supplies into the country. Its murder rate at one point last year was the highest in the world and really quite concerning. What is the Foreign Office able to do to assist it? I am concerned that the Royal Navy's auxiliary fleet has been withdrawn, which is obviously compounding the issue. Are there any plans to help the country deal with this?

Amanda Milling: I would like to reassure you that I am well aware that this is a massive issue. The Governor and the TCI Government are looking at a range of options to tackle this. The Cayman Islands helicopter was also out supporting TCI earlier this year. This was something that was raised with me at the JMC in December, and we continue to look at options.

Q265 **Alicia Kearns:** As for my other point, the reverse side is obviously all about supporting prosperity and opportunities, and the redevelopment of the airport really is fundamental for them. It would be really good to see the UK Government show that they are investing in that continued prosperity and supporting them, because I think that is their main infrastructure ask of the Government. It would be great to see any progress on that.

Amanda Milling: I am not going to make a commitment today, but the overseas territories are part of our family. We held the JMC in December last year, and it was actually the first in-person meeting since 2018. It was a real opportunity to look at our relationships and how we build them and ensure that each and every one has economic prosperity and that we actually deal with some of the issues that they have raised with us. I am working on a number of different things in that space.

It was quite moving when we deployed the vaccines to the OTs last year. We got them to every single OT—it doesn't matter where you are in the world—and that was quite a feat. It was really appreciated. They really recognised the value of the relationship, and that was a big opportunity for us to build on that relationship. When I was in the Cayman Islands about a month ago, seeing the BA flight landing with those vaccines on board was pretty moving.

Chair: Thank you very much indeed for a very efficient session, for which I am very grateful. Thank you for agreeing to follow up on those items, for which I am also very grateful.