

# Science and Technology Committee

## Oral evidence: [Leaving the EU: Implications and opportunities for science and research](#), HC 502

Wednesday 26 October 2016

Ordered by the House of Commons to be published on 26 October 2016.

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Members present: Stephen Metcalfe (Chair); Victoria Borwick; Jim Dowd; Chris Green; Dr Tania Mathias; Carol Monaghan; Derek Thomas; Matt Warman

Questions 158 - 224

### Witnesses

**I: Mr Robin Walker MP**, Parliamentary Under-Secretary of State, Department for Exiting the European Union, **Jo Johnson MP**, Minister of State for Universities, Science, Research and Innovation, Department for Business, Energy and Industrial Strategy, and **Gareth Davies**, Director General, Department for Business, Energy and Industrial Strategy.

Written evidence from witnesses:

- [Department for Business, Energy and Industrial Strategy](#)



## Examination of witnesses

Mr Robin Walker MP, Jo Johnson MP and Gareth Davies.

Q158 **Chair:** Good afternoon and thank you for joining us. For the record, could you state who you are and in what capacity?

**Mr Walker:** I am Robin Walker, the Parliamentary Under-Secretary at the Department for Exiting the European Union.

**Jo Johnson:** Good afternoon. I am Jo Johnson, Minister of State for Universities and Science.

**Gareth Davies:** I am Gareth Davies. I am the director general, business and science in the Department for Business, Energy and Industrial Strategy.

Q159 **Chair:** Thank you very much, and welcome. Mr Walker, what would you describe as the risks and opportunities of Brexit for the science and research community? Who has been briefing you on those and how have they been going about that?

**Mr Walker:** Chair, first of all I congratulate you on your election. I know it was in competition with a very strong field. It is a pleasure to be here today.

I recognise that this is one of the areas where there are enormous opportunities, but there are also risks. We, as a Department, will need to work through those with every other Department in Whitehall, quite frankly, and with every part of government to make sure that we have a full picture, industry by industry and on a sectoral basis, of all the potential impacts. We are engaged in that process at the moment. Right now, our Department is going through the process of consultation with different sectors across the economy, with the universities sector and the key sectors that are dependent on science. Of course, as a global competitive nation, our position in science and technology is absolutely crucial. We recognise that this is one of the things we have to get right.

Colleagues will recall that many of us took positions during the referendum that emphasised the importance of these issues. Now it is for all of us to come together and make sure that we come up with the right answers and the right solutions. I have come here today from a chemicals industry roundtable. That is just one example of some of the engagement we are doing. We are in the process of working across Whitehall on a sectoral analysis of all the potential impacts. We will be advised by our colleagues in key Departments on the areas for which they have responsibility.

Q160 **Chair:** You are in close liaison with the Science Minister, Mr Johnson. I understand what you are saying, but have you yet actually identified where the opportunities and risks specifically relating to science and research lie?



**Mr Walker:** We are looking at that on a sectoral basis. For each sector, we are looking at where the opportunities and risks lie. One of the pieces of reassurance I can give you is that we hear from almost every sector of the economy of the huge importance and value of research. That is something we will want to work into our plans. Obviously, what I cannot do at this stage is set out unilateral positions ahead of negotiations on behalf of the Government, but we will want to make sure that our hand is as strong as it possibly can be when it comes to keeping the UK competitive in this field.

Q161 **Chair:** Your job description on the GOV.UK website basically says that your responsibilities are to "support the Department for Exiting the EU." Do you have specific responsibilities or is it a very broad job?

**Mr Walker:** I believe that there now more detailed ministerial responsibilities for our Department, which are available in the full list of ministerial responsibilities. Within the areas that I am taking responsibility for would be the services side of things; the UK's future relationship with the EU; and specifically universities. That is one of the reasons why it is me giving evidence to you today rather than one of our other Ministers. I have taken a strong interest in that. In fact, all our Ministers have been engaging in these issues because of their cross-cutting impact.

Q162 **Chair:** You will be having regular meetings with Minister Johnson and exploring those areas specifically.

**Mr Walker:** Absolutely. Across every area of government we will be working with the Departments that have responsibility. For instance, I have done some roundtables and had meetings with DEFRA as regards environmental issues and how they will affect the future on that side. I have done some with the CMS Department as regards voluntary organisations and their responsibilities there. We will be doing lots with BEIS because of the huge range of areas they cover. The meeting I was at this morning with the chemicals industry was in BEIS. We will be working very closely together to make sure we have a full understanding of the issues being raised with both Departments.

Q163 **Chair:** Obviously, you are in the process of getting the Department fully established, but the Government have now published the structure of the senior management team at DExEU. It includes a civil servant as director for cross-government policy co-ordination. Who leads on that from the ministerial side, and how do they provide that cross-government co-ordination?

**Mr Walker:** To be honest with you, cross-government co-ordination is clearly a hugely important part of the task we have to do. From a civil service perspective, it is absolutely right that we have someone at director level who is looking at that. As Ministers we all have responsibility for that, quite frankly, because it is something that each of us, within our own specific areas of responsibility, will need to liaise on



with different Government Departments. When it comes to financial services, clearly the Treasury would be a key contact. When it comes to, for instance, the chemicals industry, it would very clearly be BEIS. We will need to make sure that all of us are aware of the need to keep colleagues informed and to be informed by colleagues, and that that feeds into the process. The directorate you mentioned is playing a very important part in pulling together all the engagement work that each individual Government Department is doing around Brexit, and making sure that gets fed into us.

Q164 **Chair:** Where does science and research fit into that structure? How does it get its voice heard?

**Mr Walker:** I have a copy of the structure in front of me. I was thinking about this earlier. There are so many areas across the structure where it is going to be of importance. There are clearly science elements in the directorate of trade and partnerships. When it comes to security and migration, we will want to make sure that the views of the scientific community are fed into our whole policy approach. It is not possible to say that there is any one particular area where this belongs. It is something that we are going to have to take into account in every area of the Department's work.

Q165 **Chair:** So, at this early stage, it would be difficult to point to someone to whom we would direct science and research concerns.

**Mr Walker:** I think you will direct those concerns to me and to the Secretary of State. These are such important issues that we will want them to be raised at absolutely the top level. We will want to engage with them, but we will also be dealing very closely with Jo. Making sure you carry on the excellent relationship I am sure you have will be very important there as well.

Q166 **Chair:** One of the concerns that has been raised, and it struck me as well, is that at the moment there is no chief scientific adviser for the Department. What is the timescale for appointing one?

**Mr Walker:** A vacancy has been advertised there.<sup>1</sup> We have access to Sir Mark Walport, the Government's chief scientific adviser, and I think the Secretary of State is meeting him next week. We also have access to the Government Office for Science. We will be using those resources to make sure that we are properly informed on these things. Clearly, the work of your Committee has an important part to play in raising the profile of some of these issues. I know that you have already done that as a Committee in the past. I am sure that you will continue to do it, and we will continue to respond.

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<sup>1</sup> Note by witness: This refers to the following webpage, where the membership for the Department for Exiting the European Union is listed as 'vacant':



Q167 **Chair:** But in terms of timescale.

**Mr Walker:** I could not comment on a specific timescale for a specific job, but it is clearly something where we will want to make sure that we have the right advice available to us. We will be able to reach out to other Departments if we feel we need their help on these matters. As I say, the Government Office for Science is a resource for the whole of Government.

Q168 **Chair:** Thank you. I have one final point for Minister Johnson regarding chief scientific advisers. Who is responsible across the whole of the Government for making sure that there is a comprehensive network of chief scientific advisers?

**Jo Johnson:** Sir Mark Walport is the Government chief scientific adviser. He reports to the Cabinet Secretary as a permanent secretary, and thereon to the Prime Minister.

Q169 **Chair:** Do you have any view on how quickly a CSA should be appointed?

**Jo Johnson:** The Department for Exiting the European Union has its advert out.<sup>2</sup> It is obviously looking for the best possible scientific advice and input to its policy making and, I am sure, will take the right steps to get that in place as soon as possible.

Q170 **Chris Green:** Minister Johnson, the Treasury has announced that it will underwrite funding for projects that extend beyond the point at which the UK leaves the European Union. European Structural and Investment Fund projects agreed before the autumn statement are included in the guarantee. Could you confirm whether there is an equivalent cut-off date for underwriting Horizon 2020 funding?

**Jo Johnson:** No, there is no such cut-off date. The Treasury is on the hook for additional funds until the point, and it may span beyond the point, when we formally leave the European Union. Funds that are committed to by the European Commission prior to our departure will be honoured by HMT if they fall due after the point of Brexit.

Q171 **Chris Green:** Does that include joint technology initiatives?

**Jo Johnson:** All competitively bid for research funds are covered by the Treasury guarantee.

Q172 **Chris Green:** So organisations such as Manchester City Council, who have told us that they have ESIF proposals that are unlikely to be signed before the autumn statement, should have nothing to fear.

**Jo Johnson:** ESIF is a different funding stream. If you want details on that, I point you towards the Treasury statement of 13 August. In terms of what the Treasury guarantee specifically relates to, I point you to the statement I mentioned.

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<sup>2</sup> Note by witness: See previous footnote. At present, we are not advertising for applicants.



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Q173 **Chris Green:** The University of Portsmouth has a couple of funding projects receiving ERC grants. One goes up to 2019 and another to 2020. Do you have an estimate of how many multi-year Horizon 2020 projects will currently extend beyond the likely point of Brexit in 2019, assuming that we announce the start of article 50 negotiations in March next year?

**Jo Johnson:** No, not off the top of my head. I do not have the number of projects, but we can certainly provide additional information to the Committee on that.

Q174 **Dr Mathias:** The Treasury's guarantees relate to European Union legal commitments. Is there a need to underwrite the payments if it is already a legal commitment?

**Jo Johnson:** There was strong demand from the stakeholder community for this reassurance. About two thirds of the inquiries that BIS received, in the email inbox we set up to try to capture concerns from the sector, related to the question of what happens to payments that might fall due after the point of Brexit.

Q175 **Dr Mathias:** You are not worried about the commitment; it is just to reassure business.

**Jo Johnson:** Those who apply for innovation support from the business community, and institutions in the UK who are participating in European research funding streams, were looking for that reassurance, so that they could tell their partnering counterparts across the European Union that there would be no funding issue with respect to British participation.

Q176 **Dr Mathias:** But if they had not directly emailed you, you would not have been concerned. You have confidence in that legal commitment, or will it be part of negotiations? That is what we are wondering.

**Jo Johnson:** Irrespective of whether it is required or not, it is there and it is providing additional and much valued assurance to the sector.

**Mr Walker:** If I may, there is one other element of this that is important. The assurances that the Treasury have provided also give people confidence in coming forward with future bids for funding. Through the whole article 50 process we will remain a member of the European Union, with all the rights and responsibilities that it entails. It is very important that UK businesses, UK universities and people who can access research funding continue to put their bids in. That is one of the reasons why I think the guarantees that have been given are so important. They provide reassurance that it is worth continuing to bid.

Q177 **Dr Mathias:** It sounds like a belt and braces rather than a safety net approach.

**Jo Johnson:** Let's hope there is no need for any Treasury intervention.

Q178 **Dr Mathias:** When we asked the Treasury how much money had been set aside to underwrite Horizon 2020, we were told, "It is not yet possible



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to say how many of these outstanding payments the UK will need to supplement on departure from the European Union.” Do you feel that you have a blank cheque from the Treasury for this?

**Jo Johnson:** Assurances have been provided, which, as I said, have been really well received by the sector. It is understandable that the Treasury cannot give a precise figure on it, because these are bids that are won on a competitive basis. We cannot guarantee with any precision what level of success our institutions will have, whether it will match past levels of success or be greater or the same as. It is inherently impossible to put a precise number on it.

Q179 **Dr Mathias:** But a strong commitment, nevertheless.

**Jo Johnson:** Yes, it is a strong commitment. It has been matched by reassuring messages from Commissioner Moedas in Brussels, who, when he came to the ESOF conference in Manchester over the summer, said very clearly that funds from Horizon 2020 and other competitively bid for research streams should continue to be awarded on a competitive basis and on a level playing field, and that there should be no concerns about participating with UK institutions. That was a really important message from Commissioner Moedas. He is doing a good job at maintaining a level playing field, so that British institutions can continue to participate at the same sort of levels as before.

Q180 **Dr Mathias:** That is very reassuring. If there is any new money, can you guarantee that it will be new money and not from the existing science budget?

**Jo Johnson:** Yes, absolutely. We are on the record that this is new, additional money beyond the £26.3 billion that the Government have already committed to science for the period in question.

Q181 **Carol Monaghan:** Yesterday, I hosted a meeting of Russell Group representatives, who talked about the reputational damage that had already been done to the higher education sector by Brexit. One of the issues raised was the importance of securing freedom of movement, particularly for talented researchers. How are we going to ensure that the needs of the research community are factored into the discussions of the Department for Exiting the EU?

**Mr Walker:** I totally recognise the need to provide reassurance where we can on this, and to engage with all stakeholders in the research community, including in the universities. You mentioned the Russell Group, but it is also in the business community.

I pointed out at questions the other day that the Secretary of State was pretty unequivocal in his speech to the party conference when he set out, in very broad terms, “We will always welcome those with the skills, the drive and the expertise to make our nation better still. If we are to win in the global marketplace, we must win the global battle for talent. Britain has always been one of the most tolerant and welcoming places...It must





and it will remain so." I made the point that that is particularly the case in terms of science and research.

This is an area where we want to create an immigration system that allows us to exert control, which people have asked for, over the overall numbers, but also to encourage the brightest and the best to come here. That is a policy that will have to be worked on across government. It will not be for our Department on its own to define the UK's future immigration system. Our job is to conduct the negotiations in a way that gives the UK the powers to control the system going forward, but within that we absolutely recognise the need to continue to attract talent and the value that people in the research community bring to our country. That is certainly something that we will be feeding in, and no doubt BEIS will be feeding in, in discussions with the Home Office, the Treasury and other Departments that will be making those decisions in the future.

**Q182 Carol Monaghan:** However, words like "controlling immigration" send shudders of fear through the research community. Do the Government intend to control the number of researchers, skilled or otherwise, leading lights in the research community, or people just starting out? Do they intend to control the numbers of those types of people and students, or are they going to be able to move freely?

**Mr Walker:** The precise way in which we are going to control movement of EU nationals to Britain after we leave the EU has not yet been determined. It is a process on which we will have to have a cross-government conversation. As I say, the lead Department on that would be the Home Office in the future, but we will certainly be making clear the value of mobility, particularly in the research world. We have had some very good engagement already not just from universities and businesses but from the presidents of the royal academies and the Royal Society on this. Our whole ministerial team was engaged with recognising that the UK has always benefited from attracting bright people to our research community. We should certainly aim to be doing that in the future.

Some of that rhetoric, in terms of the Secretary of State's speech—the lines about science and attracting talent—were there very deliberately, because it is something about which we realise we have an important message to send. The more we can send that message over the next two years, the better.

**Q183 Carol Monaghan:** People are hearing that message, but I do not think that they necessarily believe it. I spoke to a young researcher from Italy. He was in his 20s. He had no family ties. He was living in Glasgow and is now considering moving elsewhere because he does not feel that the guarantees are there. Are the Government really committed to protecting the mobility of these researchers? Rather than making statements, are they going to come up with a solid piece of legislation that protects these researchers' freedom of movement?





**Mr Walker:** Clearly, decisions on freedom of movement will be something that we have to take through the negotiation process, and reach agreements as to what the future of that looks like afterwards. Within that, we want to send the message very loudly and clearly that we want Britain to be a country that is open to talent and attracting the best and the brightest. We recognise the contribution that researchers can make in that respect.

There is also the discussion—we had a debate on it last week—around the reciprocal rights of EU and UK nationals. We have been very clear in our aim, which is to protect both, and to make sure that we are protecting UK nationals in the EU, of whom there are many—there will be some in EU research communities—and EU nationals within the UK. Certainly our aim going forward is to make that clear early in the process. If we can, we will be delighted to get that done early in the process.

I absolutely take on board the importance of the points you are making. We all want, as soon as we can, to be able to provide those reassurances, but we cannot take a unilateral position ahead of negotiations and ahead of reaching agreement. That is where, perhaps, some of the political heat has been.

Q184 **Carol Monaghan:** This is why there is such concern in the scientific and research community that these decisions are not being made now and they are not getting the guarantees now. I hope you are taking these points on board seriously.

**Mr Walker:** I recognise that there are benefits to the scientific community, the business community and many of the groups with which we are engaging in being able to provide those reassurances. Of course, we will want to get reciprocal reassurances on British nationals, but I take the point you are making.

Q185 **Dr Mathias:** On the point about reassuring scientists, would the Science Minister be able to say unilaterally that we will absolutely protect the EU nationals in this country who are working in our science and technology field?

**Jo Johnson:** The Prime Minister has made it very clear that she expects to be able to guarantee those rights, and only could not do so in the event that other countries did not. That is the position of the Government as a whole.

Q186 **Dr Mathias:** But, as Science Minister, can you unilaterally give reassurance to the science community that you will fight for that and none of them needs to leave this country?

**Jo Johnson:** The nature of government is a collective activity. The Prime Minister has stated the Government's policy. We understand that freedom of movement for brilliant people is important, and the mobility of scientists and our ability to attract talent is of fundamental importance, as the Secretary of State for the Department of Exiting the European



Union put it in his speech the other day. The Prime Minister's position is the definitive statement of Government policy in this area.

**Q187 Chair:** What we are all keen to hear is some semblance of ideas. We hear warm words about being open for people with the right skills and talents to come to the UK to support our economy, but we have not heard any substance around what that might look like going forward. I understand the arguments about EU nationals who are here, and our nationals who are in the EU, but this is a slightly different argument. This is about people who can move around the world and place themselves anywhere. We want still to be a destination of choice for those people. It is hearing those ideas sooner rather than later, before people start to drift away from thinking of us as the place where they should come and do their research. It is just a thought. You are not going to be able to commit to that now, but we are going to be pressing for answers on this as we move forward.

**Mr Walker:** It is very important that that should be part of the vision for a global Britain that the Prime Minister set out, and there are opportunities to make sure that this is a wider conversation than just our relationship with the EU. We all want to continue to attract talent from wherever it may come.

**Q188 Matt Warman:** It is fair to say that anyone who was in favour of leaving the European Union struggled to find friends in the science and technology community. You said in July, Mr Johnson, that there would be "a comprehensive communications strategy" around the opportunities that Brexit provides for UK science and research. Undoubtedly, there are opportunities, but could you update us on how that communications strategy is going?

**Jo Johnson:** We see opportunities for this country's science base from our decision to exit the European Union. We see opportunities to think again from first principles about the kinds of regulatory frameworks that are best suited to our interests. We have already mentioned in this afternoon's proceedings the chemicals framework—REACH—for example. That is something which, if we are not part of the existing framework, we might want to reframe in another way. There are data privacy arrangements, GM, animal testing and so on. There are opportunities on the regulatory front. I am not prejudging this in any way, but were we in a position to do so it might be interesting to rethink how we could frame those in a different way.

Similarly, given a clean sheet of paper, we could think again from first principles about how we fund international science and research collaboration around the world. We could think again about where we want to allocate resources, and with which countries, so that we get the highest returns from such collaborations and so on. That is not to prejudge any relationship that we might or might not have with Horizon 2020 and successive framework programmes. The referendum result at



least gives us the opportunity to think from first principles about these kinds of questions. Those are opportunities.

Lastly, the industrial strategy presents an enormous opportunity for science and innovation in this country. We are clear that we want science and innovation to be at the very heart of industrial strategy, as a means for us to improve our economic performance and make this a country that works for everyone.

**Q189 Matt Warman:** Some vice-chancellors, post-referendum, have observed that at the moment European funding forces them to collaborate with certain European institutions. If they were not in that model, they would obviously be able to apply to collaborate more widely around the world. Have either of the Departments had a look at what that freedom might mean, in terms of trying to put a number on the opportunities or trying to get a sense of what it might mean concretely, or have you not got that far yet?

**Jo Johnson:** These are questions that we are analysing at the moment. They are deeply complex and we now understand more about how the freedom we have to think again from first principles might be deployed if we end up being in a position to do that.

**Q190 Matt Warman:** You asked researchers to give you examples of where people have said that they do not want to collaborate with them. I think you told the Lords Committee yesterday that you had 132 emails. You said that you thought two thirds of them were dealt with, in the sense that they were funding issues. Have you gone back to those institutions and said, "Do you feel happier now that we have dealt with that?" or are you assuming that?

**Jo Johnson:** I have not personally gone back to all two thirds of those, but the team is in dialogue with those who submitted concerns to the inbox that we provided, and is following up on the Treasury's announcement to check that it has indeed addressed the issues that they raised. The remaining third of the questions related to mobility issues and the points Ms Monaghan was making about residents' rights to stay in the UK and the kind of welcome that they felt they were going to get here.

**Q191 Matt Warman:** Does that mean that of those 132 there was not actually a concrete example of something that had not happened that should have done?

**Jo Johnson:** We are still listening for or looking for evidence of concrete discrimination. It may be, as many have led us to understand, that this is not something that we will actually ever find; by its nature, you might not understand when an institution has not received a call because they are a UK institution. It is harder to get data on that sort of phenomenon. We have not received any really significant concrete evidence of discrimination at this point, but we are very vigilant and we are not complacent about that.



Q192 **Matt Warman:** You also told us in July that you would be updating Commissioner Moedas on the scientific community's view of how things are going. Have you had that conversation yet, and what did you say?

**Jo Johnson:** I am in pretty frequent contact with Commissioner Moedas and our representatives in Brussels. I was on the phone 10 minutes before I came in here with our UK representative Sir Ivan Rogers talking about various aspects of our relations with the European Union and funding streams that we are interested in from it. We are in constant dialogue with key figures in Brussels.

Q193 **Matt Warman:** Are you able confidently to promote an optimistic picture of what our post-Brexit relationship looks like to the Commission?

**Jo Johnson:** Yes. British science wants to go from strength to strength in this new world. We want to support it in doing so. That means making sure that it is getting the best possible funding settlements available within the fiscal constraints that the Government find themselves in at any time or other. It means making sure that we have a really strong pipeline of talent that will enable us to take advantage of the research the community is generating. It means making sure that we are still attractive to collaboration around the world; that we are open, that we welcome talent and that we continue to generate a spectacular return on the public investment in our science base. That is the vision for science.

Q194 **Matt Warman:** There has been some evidence of the sector-by-sector approach on this with the life sciences report that George Freeman did back in July. Are you going to be doing more of that and breaking down the area into slightly more manageable parts? What does that look like process-wise? When can we expect to see what?

**Jo Johnson:** I am glad that you asked that. We have had a significant amount of engagement with the various representative bodies from the sector. I am glad that I am appearing jointly with the Minister from the Department for Exiting the European Union. It gives us a chance today to demonstrate how closely we are working together, and indeed we are. We want to formalise this arrangement in some way so that we can channel, as effectively as possible, the views of the various parts of the science and university community into the work that the Department for Exiting the European Union is undertaking. We are setting up a high-level forum that the Minister next to me has kindly agreed to attend, and which will make sure that we are really capturing all the views of the distinct parts of the community.

Q195 **Matt Warman:** Does that mean there will be a series of individual reports like the life sciences report?

**Jo Johnson:** If that would be useful; I do not want to commit to reports that may or may not materialise at this point. We want to work on the routes that are going to be most effective in getting the Department of the Minister next to me as well informed as possible about the interests of the community. We have already attended a number of meetings



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together. We met all the heads of the academies, together with his Secretary of State, David Davis, and we have had other meetings as well. We are really working tightly together to ensure that the community's views and interests are fully represented in his Department's work.

Q196 **Matt Warman:** Finally, on the subject of reports that have appeared, you might be familiar with the report in the *Telegraph* on Saturday that the life sciences report had gone "straight into the hopper." I imagine you might not share that view. What was your view on the life sciences report?

**Jo Johnson:** I am grateful to have received it. I do not recognise the quote; I am not sure who provided that.

**Matt Warman:** They were not named, funnily enough.

**Jo Johnson:** It certainly does not reflect the view either of the Department for Exiting the European Union or that of the Department of Business, Energy and Industrial Strategy. We welcome submissions from the sector about how we can maximise the opportunities from Brexit and minimise the risks. The life sciences report is a valuable addition to our information base.

Q197 **Matt Warman:** Are you likely to publish an official Government response to it?

**Jo Johnson:** It was a private body report so that would not normally be required. We are certainly absorbing it and making sure that its conclusions and recommendations are distilled and fed into the official machine. It is not a hopper.

Q198 **Chris Green:** Our greatest ambassadors for UK science are our scientists. Almost to a man and woman, they were for remaining in the European Union, so there needs to be a big change in mindset within the scientific community. With all the meetings and communications you have had with scientists and the broader establishment, do you get a sense that they are now looking beyond the decision at what post-Brexit Britain will look like? Are they looking forward to the opportunities it will provide? In relation to the concerns that they may have had in the past, and at present, with the EU—the problems that were there and are there—are they now looking at how they can resolve those problems?

**Mr Walker:** You make a very good point. Clearly for many of us there has been a process of moving on from the campaign and the advocacy that we took on one side or another to now looking at this process and saying, "How can we make this work and how can we make a success of this?" From the scientists, the universities and the businesses that we have been engaging with across different areas and different sectors, we have certainly seen a desire not just to accentuate the positive but to really work through some of the challenges in a way that says, "How can we make a positive and how can we make a success out of these challenges?"



That is very welcome. An important part of the work that we need to do in our engagement is to be very up front with people and recognise as a Department that there are challenges. We recognise that it is not just plain sailing—"We're going to make this work at any cost and it's all going to be okay because we say it is." We need to make it work properly. The sectoral engagement we can have from scientists and experts in every area will be very much valued in that. If they highlight some of the specific areas where they see big challenges but they see a way to make a success of them, we will welcome that; also if they highlight some of the opportunities to do things better than we did in the past. That is definitely part of the process of engagement, and some of the conversations we have been having with individual sectoral groups have followed that as well.

**Q199 Chris Green:** Conversations have moved beyond, "This is what we had with the EU; let's keep these things as much as possible post-Brexit"?

**Jo Johnson:** Yes, I think that is right. As I said earlier, we have a chance to look again at first principles and how we do things like funding international science collaboration. If we have a blank sheet of paper—I am not saying we will have a blank sheet of paper—how would we construct our international funding streams for these kinds of collaborations? Where would we get the greatest returns? Where would we deliver the most interesting science? It is a question that is interesting for us all to be able to think about now. We may never get a chance to provide a different answer, but at least we can think about it for the time being.

**Q200 Chris Green:** I want to go back to the comprehensive communications strategy that you mentioned in July, just in case I did not hear the answer. Obviously, we have had reassurance and guarantees from the Treasury. What else specifically has been done to put in place a communications strategy? You sent out your email and invited people to correspond with you if they have concerns. I am sure you will want to reiterate that now. Is there anything else?

**Jo Johnson:** Yes, there is. Let me try to update you. When we last discussed this, it was very early days. We put in a communications strategy that had a number of component parts. There have been public official communications that have been aiming to provide important reassurances on key areas of uncertainty. One of them was around access of European students to our loan book. We did that in two bites. Very quickly after the referendum, on the Monday that followed the Thursday vote, we provided an assurance that students for the 2016-17 academic year would be able to access the loan book and have access to home fee status for the duration of their course of studies. We followed that up with a second bite in that particular area in October, when we said that students commencing their studies in the 2017-18 academic year would be in the same situation. We would be good for home fee status and full access to the student loan book for the duration of their





studies, even if that meant that they still had access to our loan book after the point of Brexit.

Those are two things, and you mentioned the Treasury's announcement on 13 August. Those three pieces are the key detailed crunchy elements of our comms strategy. Added to that is the PM's public letter to Sir Paul Nurse shortly after she took office, saying that there would be a positive outcome for science from our decision to exit the European Union. There is also the drumbeat of reassuring speeches that you have heard from Cabinet Ministers and Ministers such as myself around the importance that we attach to our ability to continue to attract talent from around the world to sustain our science base, with the Secretary of State for Exiting the European Union foremost among them, as well as the Foreign Secretary just this weekend before the Chevening scholars. There is a drumbeat of such announcements from senior members of the Government. An important part of the communications strategy has been what we are all doing on a daily basis in our meetings. I have had several roundtables in the last few days alone. I have a roundtable with UUK tomorrow and a roundtable with GuildHE on Thursday. I have dinner with the Russell Group tomorrow, a University Alliance roundtable on Monday and a MillionPlus roundtable on Monday as well. There is a constant drumbeat of engagement with the sector to reassure them that we are on the case, listening to their concerns and trying, wherever we can, to address them.

**Q201 Chris Green:** I have one final point. When you have high-level meetings with all those various organisations, do they report back to you that they are feeding down to their members and supporters the outcome of those meetings? It is all very well reassuring the chief executive and the president of an organisation, but it is the members who are the ones at the coalface and probably expressing the deepest concern.

**Jo Johnson:** It is up to those representative bodies to decide how they communicate with their members. I imagine that they do. I believe that they automatically communicate with their members, but I cannot speak to that directly.

**Mr Walker:** At some of the roundtables that we have been having, we found very good engagement from very large businesses but also from very small ones. It is good when the industry bodies are able to get together a real range of different businesses of different scales so that they can all hear that message. Indeed, in some of those meetings we have had feedback from the smaller businesses that they find it refreshing to be included in these processes. I think the Prime Minister was right, when she began her process of engagement and consultation, to start with the small businesses and get the FSB into Downing Street to talk about the importance of engagement on this front. If we can make sure that we have that reach across the representative bodies, the big businesses in the industries and some of the SMEs, it really helps in the engagement process.





Q202 **Jim Dowd:** First of all, I apologise to you, Chair, the Committee and of course our witnesses for being detained elsewhere. After I arrived, I heard Minister Johnson say, in response to Matt, that you have heard about discrimination and exclusion of British individuals and bodies, but you do not actually have any concrete evidence that that is happening. Last week, we were taking evidence on regenerative medicine. One of the witnesses insisted that this was happening. When he was questioned as to whether it was anecdotal or not, he insisted that it had happened and that he knew people it had happened to. Perhaps if we obtain that information, we could pass it on to you.

**Jo Johnson:** Thank you. We would welcome concrete examples of it, so that we can bring it to the attention of anybody in the Commission who would deal with it. I would immediately bring it to the attention of Commissioner Moedas, for example, or of the participating institution.

Q203 **Jim Dowd:** I want to look at the broader financial implications. The budget for 2019-2020 is still only in the indicative bracket. Given that various assurances have been provided about there being continuity and no difference between what the science and research community could have expected from continuing EU engagement and what will face us after March 2019, how much certainty can be provided this far out, even the unnecessary certainty that my honourable friend the Leader of the Opposition spoke about earlier today?

**Jo Johnson:** As I said, we are in print in respect of this being additional money that is beyond the £26.3 billion that we have committed for science over the period that you mentioned. There is no intention of dipping into the ring fence to fund any shortfall. We do not know whether there will be any shortfall, but there will be no dipping into the ring fence. That is the commitment that has been made to the community.

Q204 **Jim Dowd:** Does that presume continuing engagement in Horizon 2020? Some people fear that there will be a de facto slow disengagement over the intervening period, and that by the time we get to 2018-19 there will be a different position, comparing 2019-20 to it, than there would have been had there been no disruption to our relationship with our European partners.

**Jo Johnson:** I understand that we are seeing applications to these funding streams running at roughly the level they were before the referendum vote on 23 June. We hope that they will continue to run strongly for as long as we are part of the European Union. We will have to see what happens in terms of our access to these schemes, subject to the broader negotiation thereafter.

**Mr Walker:** You might not have been in the room earlier when I was making the point that one of the real benefits of the Treasury guarantees, and the fact that the Treasury has stepped in in this way, is that it sends the message to firms, to universities and to others to keep on bidding. It is very important to recognise that the article 50 process will take some



time, and during that time we will be paying into the EU budgets. It is very important that we get out the value that we are due and that we continue to meet all our rights and responsibilities through that time. As Jo says, obviously we cannot make unilateral declarations as to what the end point of the negotiations will be with regard to future programmes, but making sure that everyone in the UK recognises that they still have access to these programmes and that they should be submitting bids is a positive step.

**Q205 Jim Dowd:** Let me apologise again. Obviously, having not been here earlier, if I ask questions that have already been asked, I apologise.

We need to maintain funding for collaborative research following Brexit. Are the Government doing any work to determine the type and nature of collaborative funding programmes that would need to be set up if, for example, we were unable to continue in Horizon 2020?

**Gareth Davies:** There is a range of different collaborations that are already funded through the science ring fence now. The main programme is the global challenges fund, which has been set up with £1.5 billion over the rest of the spending review period. That is directly aimed at supporting developing countries in their social and economic challenges, and builds on the excellent work from the UK science base. If you look through the work of the research councils, the Royal Society and the British Academy, they fund a range of postdoctoral fellows and programmes of participation and collaboration. For example, NERC—the Natural Environment Research Council—has a lead agency agreement with the US NSF. Similarly, EPSRC has bilateral relationships with China, India, Japan and the United States.

While obviously there is significant engagement through the formal mechanisms of Horizon 2020, there are a large number of programmes running right the way across globally already funded through the research councils. We are looking to build on the bilateral relationships between the individual research councils and the academies and at what we can do through the global challenges research fund, which is a new funding vehicle that was set up as part of the spending review in 2015.

**Q206 Jim Dowd:** If we are not, as I suspect, able to negotiate access to Horizon 2020, would some other form of arrangement with the remaining members of the EU be envisaged?

**Gareth Davies:** One of the things you see when you look at the nature of the scientific community's relationship with Europe is the complexity of it. Some of the relationships are obviously formal and through the European Union. Others are multilateral and predate our relationship with Europe. As you work through the individual research institutions, it is very important to discriminate between those different types. There is CERN on the one hand, and JET and ITER, on nuclear fusion. There is work on European spallation centres and SKA in Manchester. They all have different legal bases and different ways of participation. A very



complex and variable geometry sits behind these relationships. There is benefit from both formal and informal funding mechanisms. As we step back and look, as the Minister suggested, at the opportunities from exiting the European Union around the nature of our collaboration, access to talent and funding and industrial strategy, we can think through the optimal way in which we can participate with Europe.

The thing I really want to emphasise to the Committee is that science in the UK is a world-class sector. The strength of our sector is globally renowned. I am personally very proud to see that THE recently marked Oxford as the top university in the world. Similarly, we often have researchers coming globally to learn from the UK and wanting actively to participate with the UK. I am very confident about the UK's continued strength in science and research over the coming years, but it will be important to work very carefully through these issues.

**Q207 Jim Dowd:** You mentioned students earlier, Minister, and the access they would have to loans. UCL have pointed out that research council funding for PhD students is for those normally resident in the UK, with an EU scheme supporting EU students who come here. Would the Government be looking to replicate the latter, which would clearly not continue?

**Jo Johnson:** It is too early to say at this stage. We want to consider these issues as part of the broader picture. As my colleague said earlier, these sorts of issues, which touch on freedom of movement, are bound up with broader negotiation.

**Q208 Jim Dowd:** Surely, we would still want to attract the best and the brightest from the EU.

**Jo Johnson:** Indeed. As we discussed earlier, we want to ensure that this is a sector that is available to access talent.

**Q209 Chair:** I want to go back briefly to bilateral and multilateral collaboration post-Brexit. This may be for Mr Davies. Are there any barriers to future collaboration once we have left the EU, other than the obvious ones of perhaps funding and free movement, although hopefully that will be resolved? There are no other legal boundaries because we are outside the EU.

**Gareth Davies:** As I mentioned in my previous answer, it will be very important to work systematically—work is going on among officials in the Department—to understand the nature of the legal basis for the relationships on our collaborations to date. Obviously it is a very complex picture, because some of these predate our entry to the EU. Some are managed in different ways; I touched on some of the nuclear fusion work in CERN, ITER and JET. There are different positions on things like the European spallation agreement and SKA in Jodrell Bank and others like that. We need to be able to work through systematically and understand the nature of the current set of arrangements. As we look forward to Britain being outside the European Union, we will then be able to create a whole set of relationships on a new legal footing.



The strength of UK science comes from many forums, and one of them is our ability to collaborate. If you look at recent research, the best and most highly cited research reports are typically based on international collaboration. We have the highest rate of international collaboration in our research. Over 50% of our highly cited research reports are through international collaboration. UK science is naturally outward looking and global in nature, so there is a strong basis for them to be able to do that.

**Q210 Victoria Borwick:** I would like to turn to the medicine side, which we have not touched on quite so much so far today. This is probably for Mr Walker. The Department for Exiting the EU was not involved in the recent Westminster Hall debate on the future of the European Medicines Agency. Are you aware of the medical research community's concerns?

**Mr Walker:** Yes, very much so. I followed that debate closely. It was responded to by David Mowatt, very ably, on behalf of the Government. We have engaged with the pharmaceutical and medical industries, and we heard similar concerns from them. The situation around the EMA is being considered as part of the work we are doing across all the sectors in the economy, including the life sciences sector. My colleague David Jones has met with the board representing that sector.

The implications for medicines licensed through the EMA after the UK's departure from the EU are being considered as part of the wider assessment of the UK's regulatory regime. It is too early to speculate at this stage on the future location of the EMA. What is clear is that the Medicines and Healthcare Products Regulatory Agency continues to have an unchanged position in terms of translating that work into the UK context, and will continue its work in the meantime. We have had some reassurances on that front. It is something that we all want to look at very carefully as we seek to get the best deal for the UK, and make sure that we continue to make the enormous contribution to global medicine that we have made traditionally and historically.

**Q211 Victoria Borwick:** Thank you very much indeed for that reassurance, particularly as, hopefully, this is watched further afield. I am particularly keen on that innovation and driving forward. As you say, we have experience in this country, and a fantastic history, of innovation, research and developing things. I want us to use this as an opportunity to go on with that rather than turning it into a negative. That is really what I want to make sure we are driving forward.

Earlier today, at Prime Minister's questions, we briefly talked about the acceleration proposals and new ways of getting drugs tested and into patients earlier. I am extremely keen that we do not get bogged down with who is going to regulate what, rather than driving forward all the positive things that we have been doing in this country. I am seeking reassurance from you as a team that we are going to be looking to go on. We have been talking about regenerative medicine. There are tremendous opportunities there. We are leading the research and innovation on that. I do not want to get bogged down in initials from



every country in Europe as to why we are not bringing this stuff to market.

**Mr Walker:** Absolutely. The aim is the correct one, which is to make sure we look at the practical applications of these things and how we can work through them. That is something that we are doing as part of our sectoral work. It is important to recognise that many of these decisions are something we do not have to negotiate. They are things in our own competence. We can get on with the relevant Departments in making sure that the work is being conducted and that we are putting in place everything within our own competence to make these things work.

Q212 **Victoria Borwick:** Can we get things going forward better and more speedily if we are our own nation, or will we continue to be held back? What are going to be the difficulties, the advantages and disadvantages?

**Mr Walker:** You saw some of the detailed discussion of those advantages and disadvantages during the Westminster Hall debate. I will not claim to be as much of an expert as David, who conducted that. What I would say is that we have to make sure that within our own competence we have the relevant regulatory approvals in the MHRA, and we get that set up in a way that can function effectively. We will then, through the negotiation, have to reach agreement about the future of the European regulatory process and how we engage with that. We will want to absolutely make sure that we get access to the best medicines quickly. That is something that we will be doing our bit on, but of course there is also important work there for the Department of Health.

Q213 **Victoria Borwick:** Innovation is important. Our patients in our NHS are crying out for the new things that we are developing across the board. I do not think that anyone would want to see any hesitation either in driving that forward or in enthusiasm for it.

**Mr Walker:** Absolutely.

**Jo Johnson:** We welcome the accelerated access review that came out on Monday. It has important recommendations around digitisation, faster adoption of exciting new medicines and so on. We are very supportive of it and we are working closely with colleagues in DH—Lord Prior and Nicola Blackwood—to ensure that we drive it forward at pace.

**Victoria Borwick:** That is very reassuring to people. Thank you.

Q214 **Chair:** While we have you in front of us, Minister Johnson, perhaps I could touch on a few other wider science issues, not just relating to Brexit. The Committee published its report on satellites in space back in June, which was just over four months ago. We would have been expecting a response from the Government by now. Is there a reason for the hold-up?

**Jo Johnson:** We are expecting to get the Government response to you in time for your meeting on 16 November. Apologies for the slowness; it was due to machinery of government changes, the referendum, Brexit



and other matters. We are working on it. I am grateful to the Committee for the flexibility they have shown in allowing us a bit more time to get a fuller response.

Q215 **Chair:** Thank you. We look forward to receiving the response in due course. The higher education Bill has now completed its Committee stage without any research-related amendments being accepted. Will the Government be listening to the concerns of the research community in the context of Brexit, if not in relation to the UKRI? How can the community make its voice heard?

**Jo Johnson:** A number of amendments that touched on the research part of the Bill were accepted. They were largely Government amendments that were accepted.

Q216 **Chair:** Were any Government amendments rejected?

**Jo Johnson:** We are listening very carefully to the research community. We will continue to engage very carefully as the Bill makes its way through the Houses of Parliament. We have Report stage coming up next. We are continuing to listen and to take very careful notice of all the points that the research community is making. Where the Bill can reasonably be improved, we will obviously take steps to make sure that it is.

Q217 **Chair:** Who should people be lobbying? Which Department is the best place?

**Jo Johnson:** It depends on what aspect of the Bill they have an issue with. The best person is me because I am the lead Minister on the Bill. I am always available. I will not give out my mobile number publicly, but the community knows how to get hold of me. I am always available and keen to hear from them.

Q218 **Chair:** I do not recommend giving out your mobile number publicly. I did it once—it was an interesting experience. The Government issued a call for ideas for the national innovation plan in April. How has that gone? Are you overwhelmed with ideas?

**Jo Johnson:** Innovation is going to be at the heart of the industrial strategy, along with research. We want to see the next steps of our plans for innovation in this country come through clearly in this process, which is going to lead to the formation of a proper industrial strategy. As the Committee may know, the process for that is a discussion paper with questions, which will be published around the time of the autumn statement, to be followed up by a considered response from the Government in the early new year of 2017, next year.

Q219 **Chair:** Was it a well-received call for ideas? Are people engaged?

**Jo Johnson:** Yes, there is lots of material for us to chew over.

Q220 **Chair:** We hope to see the results of that, as you say, before the autumn





statement.

**Jo Johnson:** Around the time of the autumn statement. I am not going to commit to its being before or after at this stage. It is just going to be around the time of.

Q221 **Chair:** Thank you. Since you were last before this Committee your role has been split between two Departments.

**Jo Johnson:** Yes, that is correct. Universities have moved to the Department for Education.

Q222 **Chair:** Does that mean we now have only half a Science Minister? Are you drawn in too many places?

**Jo Johnson:** No, I am covering the same policy areas that I covered before; I just have two Departments to work with. It is the same people, and they are still sitting in the same building, but they report to a different permanent secretary.

Q223 **Chair:** Finally, the list of ministerial responsibilities no longer lists the eight great technologies. Does that mean that someone else is responsible, or have they been sidelined?

**Jo Johnson:** No. They were a valuable contribution to policy thinking when they were set out in 2012, but when they were set out back then—it was four years ago—it was never suggested at the time that they would be our areas of science focus for ever and for all time. They were an indicative list of interesting areas where we might want to think about developing capacity. Time moves on, and new areas of exploration are coming up all the time. Artificial intelligence, for example, is not on the list of eight great technologies, but it is an important area of activity and we want to be participants and leaders in it. We want to move to a system where we are adaptive and able to be flexible.

Q224 **Chair:** I hear what you are saying, but the eight great technologies proved useful at the time they were published. They gave some focus to what was going on. Will that list therefore be updated and regularly published?

**Jo Johnson:** The whole point of our reforms and the creation of UKRI is to put in place a system that enables us to have a strategic vision for science in the UK and to identify where our strengths and weaknesses are, where there are gaps and where we need to devote resources. In my view, it is not a brilliant idea for me as Science Minister to tell the science community what exciting technologies they should be focusing on. I see my job as getting the best possible settlement for science within the resources that are available to Government, respecting the Haldane principle, allocating funds to the community and letting the people who know about research projects decide where the money should best be spent.

**Chair:** Thank you very much. I draw this session to a close. I thank all





# HOUSE OF COMMONS

three of you. We will obviously be considering your evidence and producing our report in due course. Until then, thank you very much for being with us.