



Select Committee on the European Union

Corrected oral evidence: Brexit: plant and animal biosecurity

Wednesday 9 May 2018

10.25 am

Watch the meeting

Members present: Lord Teverson (Chairman); Viscount Hanworth; Lord Krebs; Duke of Montrose; Lord Rooker; Lord Selkirk of Douglas; Baroness Sheehan; Viscount Ullswater; Baroness Wilcox; Lord Young of Norwood Green.

Evidence Session No. 3

Heard in Public

Questions 25 - 39

Witnesses

I: Professor Nicola Spence, Chief Plant Health Officer, Defra; Dr Christine Middlemiss, Chief Veterinary Officer; Dr Niall Moore, Chief Non-Native Species Officer; Professor Guy Poppy, Chief Scientist, Food Standards Agency.

Examination of witnesses

Professor Nicola Spence, Dr Christine Middlemiss, Dr Niall Moore and Professor Guy Poppy.

Q25 The Chairman: Welcome to the third witness session on our report into Brexit: plant and animal biosecurity. Can I remind Members that if they have any interests they need to declare they should please do that on their first intervention? In case we move on to marine areas, I point out that I am a board member of the Marine Management Organisation. This is a public session and it is being transcribed. We will send you a copy of the transcript. If there is anything in it that does not accurately record what occurred, please let us know. It can be amended. The session is also webcast. Can we please begin by asking each of you briefly to introduce yourselves for the public and those watching the webcast?

Professor Nicola Spence: I am the Chief Plant Health Officer and deputy director for plant health and bee health at Defra.

Dr Christine Middlemiss: I am the Chief Veterinary Officer at Defra, having taken over the post three months ago from the highly-respected Nigel Gibbens. I previously worked as Chief Veterinary Officer in New South Wales, Australia.

The Chairman: Congratulations on your appointment. We met your predecessor a few times.

Dr Niall Moore: I am the Chief Non-Native Species Officer for England and head the GB Non-native Species Secretariat. I am based at the Animal and Plant Health Agency.

Professor Guy Poppy: I work at the Food Standards Agency, which is not related to Defra. FSA is a non-ministerial government department and reports to Parliament through Health Ministers, not Defra Ministers. I am also a chief scientific adviser. It is a slightly different role, which involves offering scientific advice to the board and the executive of the FSA. I am one of the Chief Scientific Advisers in government who work out of the Government Office for Science, currently headed by Dr Patrick Vallance.

Q26 The Chairman: We have a panel of real talent and information. We are very much looking forward to the session. Could I start with a general question? Why do you feel that biosecurity is important to the UK? Of particular interest to this inquiry are the implications of the UK's withdrawal from the EU for biosecurity for animal and plant health, invasive species and, not least, food safety.

Dr Christine Middlemiss: Thank you very much for inviting us today. As you can imagine, biosecurity is closely related to what we do every day and we are very passionate about it. We take action and consider biosecurity to protect our environment, our health—both of people and of animals—our economy, animal welfare and trade practices from disease or pest threats that might have significant impact.

Our focus and preference are to undertake this pre-border, in agreement and through arrangements with other countries from which we receive product. We have biosecurity controls at borders. Within the country we take ongoing action, including checks and preparation to enable early detection, identification and control of any threats that come in.

Upon leaving the EU this will obviously remain a large concern. It is something we will be very active in. Over the years, more people and product have moved, and more frequently. There is a balance between enjoying all the benefits of being a trading country and managing the biosecurity risks that come with that. We need to find the balance where we are protecting our people and businesses, while not being so burdensome that it becomes overly bureaucratic and businesses are slowed. We will be striving to do this going forward. As part of the 25-year environment Plan we have very explicit high biosecurity standards. We will continue to support that while minimising the impact of changes upon industry.

Regarding animal diseases, my area of interest, our international surveillance work enables us to identify new risks. We have been very effective in this area in the past—for example, in the case of porcine epidemic diarrhoea, a new strain of pig virus that had significant impacts in America, we worked with the EU to ensure that all Members States were protected against the virus. It is a key aspect of our horizon scanning, of being prepared. We publish those assessments online as it assists to inform our trade partners. It gives those looking at the UK confidence in our systems and science and informs our industry. We work with industry together on the actions we need to take.

Animal health standards for global trading are set by the OIE, which is the animal version of the World Health Organization. It sets the standards for intercountry trade globally relating to what disease freedom looks like, surveillance and a variety of checks. We have been a member of the OIE for many years and will continue to be a member, looking to strengthen that relationship. Biosecurity is very important for protecting the UK and very important in discussions regarding our high animal health and welfare standards, but we must be flexible enough not to overly impact businesses that operate globally.

Professor Nicola Spence: From a plant health perspective, global trade, passenger movements and trading in plants and plant products have increased dramatically over the last 10 to 15 years, resulting in increased risk of importing pests and diseases. We have a strong response, including working pre-border with various countries of origin and robust action at borders. We have invested significantly in the last five years at borders to strengthen our inspectorate and surveillance capability. It is critical that we stop pests from entering wherever possible. It is more cost effective to deal with pests through prevention of entry.

We have invested in a UK plant health risk register to assist in horizon scanning and assessing the risk of new pests and diseases. It is the most comprehensive plant health risk register in the world, with almost 1,000

pests currently on the register. Many of the pests are low risk, but the register is a tool that allows us to prioritise risks more effectively and decide where action might be taken. We continue to intercept pests and diseases at the border. Last year, for example, over 300 different pests and diseases were intercepted at our borders, and action was taken to destroy the material and report them through reporting systems at a European and international level, allowing action to be taken in the countries of origins of those pests to reduce future risk.

We are also driving international standards where we believe there are high risks. *Xylella fastidiosa*, for example, is a bacterial disease you may have heard of. It is a very real threat at the moment. It is present in Italy, Spain and France. It is imperative that it is kept out of the UK.

The Chairman: What does it do? What is its threat?

Professor Nicola Spence: It is a bacterial pest that gets into the xylem, the water conducting elements of plants, and produces materials that effectively clog up the water vessels of the plant.

The Chairman: It is a threat to all plants?

Professor Nicola Spence: It has a very wide host range, yes. It does not affect all plants, but we know that it can affect at least 350 different species. It is a very serious threat. We have led the technical justifications for intervening at a European level, securing additional controls in October so we could have much more control over high-risk hosts. Material moving within the EU must now be tested each time it is moved. We have added additional protections, including making use of tools such as protected zones. The UK has more protected zones than any other Member State.

It involves designating a country or part of a country as free of a particular pest, allowing stronger controls over movement of hosts of the particular pest so that you can protect yourself. We have protected zones relating to a number of high-risk species. Of course, exiting the EU allows the opportunity to examine our import controls so that measures can be developed to better protect the UK against pests and diseases in the future.

Professor Guy Poppy: The Food Standards Agency's objective is to ensure that food is safe and what it says it is. Currently over 80% of food eaten in the UK is from the UK or from Europe, so we work very closely with European partners in relation to risk assessment, inspection and a range of other measures to ensure that we have control of the supply chain and can trace things back when an incident occurs.

We are implementing measures to ensure that we have the same level of interest and safety moving forward. One clearly must understand where future trade relationships might occur, but we are keeping an open mind as to where that might arise.

Dr Niall Moore: Biosecurity is also very important in relation to invasive species. A large number of invasive species are already here, with approximately 10 to 12 new species becoming established per year, so the threat continues to grow due to increasing trade and movement of people.

It is similar with plant health, although we differ from plant and animal health in that the legislative underpinning is much more recent. We only have EU Regulations beginning in 2015 and a list of species only from August 2016, when the provisions of the regulation came into force. Compared with other EU Member States, the UK has taken the lead in the fight against invasive species.

Q27 **Lord Krebs:** I should declare two interests. I advise Tesco and Marks & Spencer on various matters involving food.

My question is for Professor Spence. Looking at tree health, over the past few decades we have had several major diseases that have devastated tree populations, most recently Chalara ash disease, and in earlier times Dutch elm. What lessons have we learned from that? What would we do differently now to prevent another Chalara ash infection? Is what we have learned affected by Brexit?

Professor Nicola Spence: Both during and in the aftermath of the ash dieback situation Defra convened a taskforce of experts to investigate how it occurred and what lessons could be learned. The taskforce was chaired by Professor Chris Gilligan, it met several times and reported quite quickly. It developed eight recommendations, one of which was to appoint a Chief Plant Health Officer. Other recommendations were to have an improved risk and horizon-scanning process, which is why we developed the UK plant health risk register. There were recommendations regarding improved horizon scanning, looking out globally to see what pests and diseases are causing problems, and ensuring that we have the right contact with scientists and investigate the control measures available in the UK.

Preparedness was a key element of the recommendations. Whilst at the time we had contingency plans, they were not robust or comprehensive enough. We have now developed and published a generic contingency plan, with pest-specific plans that sit underneath that overarching contingency plan. Indeed, that is the plan we utilise if we get an outbreak, and we tested the plan a couple of months ago for Xylella.

Another key recommendation was that we improve co-ordination and sharing of information and we have launched a UK plant health portal. It is an online resource where we post all the information about risks, threats, and obligations for traders and members of the public. It is a very comprehensive source of information.

Finally, there were recommendations about how we work in partnership with others. This is something we have worked harder at, working with organisations that protect trees, such as the Woodland Trust. We now work closely with the Royal Horticultural Society and various other

stakeholders. We have an advisory board with members from a range of horticultural, forestry and amenity organisations, enabling us to reach out to everybody who has an interest in plants and trees and who wants to protect and trade them.

Ultimately, we work in partnership to develop recommendations for legislation and practical action. We have a network of citizen science volunteers called Observatree. It is a successful network of 200 members of the public who are passionate about trees. In their local area they actively seek to identify future threats. It helps to supplement the very extensive surveillance that government and APHA carry out. All those task-force recommendations have been implemented and additional actions taken.

A strategy was created on the basis of that, the GB Plant Biosecurity Strategy. It was launched in 2014 and it is intended that it will run to 2020. We are now considering what a future strategy will look like, particularly reflecting on exiting the EU and what opportunity that gives us to undertake additional measures we might want to do in the future.

Q28 Viscount Hanworth: It may be a naive question, but you have spoken about threats that come in. Those are the words of Dr Christine Middlemiss; Professor Nicola Spence discusses risks of importing threats and diseases. I want to ask about the threats of endogenous diseases and problems that might be created and propagated by our own farming methods, such as foot and mouth disease and BSE. Do you have any leverage or oversight in this area?

Dr Christine Middlemiss: In the animal world we have a regular, systematic and consistent risk-assessment process looking at risks internal and external to our borders. It is based on the ongoing surveillance activity done by APHA on our behalf. We have veterinary investigators linking with private vets and farmers, who submit samples for routine testing for production diseases they are concerned about. Samples are analysed to look at whether they are following normal trends or if something is new and emerging; it may be not diagnosed as a normal production disease, but we cannot explain what it is. Those threats and that intelligence is gathered monthly and analysed by a group of experts—epidemiologists, population medicine specialists, a whole number of different people look at those threats. They risk score those threats, understand and tell us what impact they might have, and how they can best be mitigated. Those are submitted to the four CVOs—me, the CVO Scotland, the CVO Wales and the CVO Northern Ireland. We meet monthly and discuss these risks, considering whether the actions are appropriate, whether more actions should be taken, and so on. We have an iterative process in managing that. Those reports are also escalated to Ministers through our monthly biosecurity meetings, so Ministers are aware of them.

Viscount Hanworth: Is it therefore fair to say that your primary concern is monitoring and diagnosis, rather than prescription?

The Chairman: It is important that we maintain focus on Brexit as an issue, rather than on internal issues only, otherwise we will not get through our material. If someone would like to answer that quickly, we will then move on.

Dr Christine Middlemiss: Prescription in terms of medicines?

Viscount Hanworth: No. Prescription in terms of methods, such as farming methods.

Dr Christine Middlemiss: We are very much linked with farming networks, the sector councils of the AHDB—the Agriculture and Horticulture Development Board—and so on. When we identify a threat, there are various actions that can be taken, including raising awareness amongst the veterinary profession or farmers, or government action, and we link into those actions at the ground level to ensure that parties have the right information and can take appropriate action.

Viscount Ullswater: I ought to declare an interest as trustee of a landed estate in Cumbria. I particularly wanted to ask Professor Spence about the concept of borders, something you mention quite considerably, and the question is entirely to do with Brexit. When discussing border supervision and border checks, do we treat things coming from outside the EU in the same way as we treat things coming from the EU? Ash dieback, for example, might have come from Poland. How do you distinguish what the border is?

Professor Nicola Spence: We have import control regimes that are set at an EU level and at a third country level. Everyone else who is not an EU Member State is a third country. We set import inspection levels based on risk. Some products from third countries are completely prohibited because the risk is perceived as too high for us to allow any import. We know, for example, that Xylella can be transmitted on coffee plants, so a complete prohibition exists on coffee plants from particular countries, such as Costa Rica, because the risk is too high. Within the EU and the 28 Member States there is a single market with the free movement of plants unless it has been demonstrated that there is a risk, in which case those plants can be passported.

Those plants are issued with a plant passport from the nursery in the country of origin, such as Poland. You can only issue a plant passport if certain requirements are met. Your country, for example, must be free of a certain pest or disease, otherwise the plant cannot be moved. There are some restrictions within the Single Market, but it is more open than the third country market.

Within the EU we can use various regulatory tools, such as protected zones, passports and pre-notification.

We have pre-notification on a number of high-risk trees. It means that if one wants to export that tree to the UK, it must meet the requirements of our protected zones: that is, it must be free of that pest or disease.

You can passport it, but the UK will be notified and the APHA inspectors can then inspect it to ensure it is indeed not only free of pests and diseases, but that it has the correct passporting and so forth. There are two slightly different systems.

When we exit the EU, we can look again at the EU regime and what we might choose to do differently, but our approach would be to look at the risk and whether there are additional measures we can take.

Professor Guy Poppy: Food is very similar, apart from a phenomenon that is quite well known: quite a lot of food comes into Rotterdam, where it enters the EU. Once it has reached the port of Rotterdam it can circulate around the Single Market with the frictionless trade issues that were mentioned earlier. The Rotterdam effect is quite an interesting situation for us to explore in the future.

The Chairman: Do you have confidence in Rotterdam's importation procedures?

Professor Guy Poppy: Rotterdam has very high levels of inspection for imports from third countries, which the other Member States use to ensure that food coming into them is fine.

Professor Nicola Spence: Just to add to Guy's comment about material entering via the roll-on roll-off ferries, obviously plant material also comes through that. We do not have facilities to inspect these ports; they move very quickly. Passporting allows us to follow up with the nursery and, indeed, we do that. We will get notification of a consignment coming in. We can visit the nursery directly and inspect it.

Lord Young of Norwood Green: I am not sure what the disease is called, but it has a huge impact on the olive trees in Italy, for example.

Professor Nicola Spence: That is Xylella.

Lord Young of Norwood Green: As a casual observation, in Tesco and a range of other stores I see many olive trees offered for sale. Does that mean that the EU passporting system is not good enough? Will it be improved after Brexit?

Professor Nicola Spence: You are quite right that olive is associated with Xylella, and the outbreak in Italy has been devastating. There is an EU emergency decision that controls the highest-risk species, which includes olive. There are six species considered to be high-risk. As you see, however, we still have olives for sale.

The new requirements for passporting and testing came in in October last year. Any material entering since then should have tested and shown to be free of Xylella, and passported. That has to happen every time it is moved. The material available now will be compliant. Some of these olive trees are very old, they are expensive, and they sit on nurseries for quite a long time. We have been doing systematic surveillance on these high-risk hosts, visiting nurseries. We have visited approximately 4,000

nurseries in the last 12 months as part of our surveillance, looking for Xylella in some of these other hosts.

We have also worked with industry and garden designers, and I think you will find that olive is now not a preferred host for garden designs or importations. A lot of nurseries have stopped importing olive altogether, because they consider the risk too high. At this year's RHS Chelsea Flower Show, imported olive is prohibited. The RHS has informed all their exhibitors of a list of high-risk hosts for Xylella, including olive, and those plants are not welcome at Chelsea unless it can be proven they are UK sourced and grown. We are getting on top of that problem. When we leave the EU, we can look at stronger measures against some of these high-risk hosts, so we can take action before a problem develops.

The Chairman: I require some clarification before we move on. Are any of the protection zones that were mentioned exclusive to the island of Ireland?

Professor Nicola Spence: Northern Ireland have a protected zone for Fireblight, a bacterial pathogen of cherries and Prunus, although they may have just made the decision to revoke that.

The Chairman: What geographical area does that cover?

Professor Nicola Spence: It was in Northern Ireland. I believe the Irish Republic has revoked its protected zone for Fireblight.

The Chairman: Are these protected zones always national or do they cross national boundaries?

Professor Nicola Spence: They can be cross-national. We have UK-level protected zones, such as a protected zone for a pathogen called sweet chestnut blight. It is a fungal pathogen of sweet chestnut and that is a UK-wide protected zone. Plant health is devolved and occasionally one of the other administrations may choose to have a protected zone because that problem is exclusive to Scotland, for example.

The Chairman: We will come on to devolution. Could you give me a bullet-point summary of what degree of autonomy of decision-making exists now, and what instruments exist now, to enable the UK to take actions that stop issues? We have protection zones and passports. Briefly, what is the list? How much autonomy do we have at the moment under the Single Market rules?

Professor Nicola Spence: We have the Plant Health Act, which is the primary legislation that forms the basis for all of our legislation. In reality, most of that is EU legislation which we have implemented. It covers things such as import controls. We have various tools, including plant passports and protected zones, which are EU instruments.

The Chairman: Yes. That is what I am looking at in particular.

Professor Nicola Spence: Again, we implement those. We have some tools that are national measures. We implemented a national measure against ash in 2012 or 2013, essentially prohibiting the import and movement of ash. We currently have a national measure against potatoes from Spain, due to a pest called Epitrix, the potato flea beetle. The UK is the only administration that has that Epitrix measure, although the Republic of Ireland chose to do it.

The Chairman: Is there no challenge from Spain about that?

Professor Nicola Spence: Yes.

The Chairman: That is what I want to understand.

Professor Nicola Spence: Yes, Spain challenged it. It does not like it. The EU do not like the UK bringing in national measures. They would prefer that we fully implement it.

The Chairman: They are not bringing an infraction against the UK for that?

Professor Nicola Spence: No, not in that case, because we had a technical case. If we simply said, "We want to do this because we sense there is a problem here", it is likely an infraction notice would be issued. In this case, however, we built the case, which was interceptions and evidence.

The Chairman: So the scientific evidence base allows us to take national measures where they are appropriate.

Professor Nicola Spence: Exactly. At the moment we can do that and take that to the standing committee at an EU level and present the case. We can ask for the EU to support it. In the case of Epitrix, the EU did not support it. We decided that the risk was so high and we had the evidence that we would go ahead and the Republic of Ireland followed. The whole of the UK, all four territories, and the Republic of Ireland, has these additional requirements for Spanish potatoes. It is working, because potatoes get washed and they do not have any evidence of flea beetle.

Q29 **The Duke of Montrose:** I declare an interest as recently retired President of the National Sheep Association. I have farmed in the west of Scotland all my life and was subject to invasive species of animals, plants and fishes, and various diseases that have been coming our way as botanical issues. We received evidence that it is unclear how the functions and principles of the EU invasive alien species Regulation will be converted in domestic law following UK withdrawal. What legislative work needs to happen in each of your policy areas to ensure that EU law is preserved and effective immediately post Brexit? Is that under way?

Professor Nicola Spence: Perhaps I will quickly cover the generic principles here and my colleague will talk specifically about the invasive species.

The Chairman: Indeed. I am aware of time, so we need to keep it concise if we can.

Professor Nicola Spence: In terms of legislation across all biosecurity elements that we are responsible for, plans are in hand to repatriate that legislation using the Withdrawal Bill. Defra is working hard to look at all the relevant legislation and to make sure that it is operable under the Withdrawal Bill, and any changes necessary will be made as part of that work. There are collectively a large number of pieces of legislation, but plans are in place for it all to be converted into the Withdrawal Bill.

Dr Niall Moore: I can assure you that the EU IAS regulation and its stringent provisions will be transferred into UK law. There is no intention to water that down. It has given us excellent and useful extra provisions over and above our previous domestic legislation, so that will be brought into UK law.

The Duke of Montrose: Is this secondary legislation that is being prepared?

Dr Niall Moore: I think in the Withdrawal Bill, yes. Some of the institutions referred to, of course, are specific - there is a committee of Member States and a scientific forum that operate under the EU IAS regulation. We have already had for many years semi-analogous bodies in GB in particular, so my policy colleagues are looking at that at the moment and discussing how that could work in the future with the devolved administrations.

Professor Guy Poppy: The food issue is slightly different from what we have heard so far. The majority of food law comes from Europe, but currently a large number of the risk assessments are done by the European Food Safety Authority and the risk managers are based in the Commission. When the Food Standards Agency was established by an Act of Parliament, it was given statutory powers related to risk assessment. It does not have statutory powers in relation to risk management. There is currently extensive consultation with colleagues in Defra and the Department of Health and Social Care to ensure that risk-management function occurs somewhere.

The risk-management function ranges from quite technical issues such as what residue levels of cadmium one might permit in shellfish, to perhaps much more politically controversial issues such as whether we should have food from gene editing or nanotechnology and such things. That risk-management function requires resolution.

The Chairman: Thank you for bringing that to our attention.

The Duke of Montrose: Do we think it would be beneficial for the UK's biosecurity to implement the EU's new plant health Regulation?

Professor Nicola Spence: For the last three years we have been working with other Members States in the Commission to develop the new EU plant health Regulation. Much of the Regulation was led by the

UK. There are some very helpful and important new elements to it. We are currently on track to implement that, partly because there are very good measures in there we would choose to implement anyway and partly because, depending on the negotiations, it is important that we keep step with the EU regulations so that, depending on our trading relationship, we are ready to have reciprocal arrangements with the EU.

Q30 Baroness Sheehan: I would like to carry on from what Professor Poppy was saying about the risk management element that we may be losing once we leave the EU. Will any UK bodies need additional powers in order to take on biosecurity roles currently fulfilled by EU bodies such as EFSA? Within your answer, would you include the oversight enforcement mechanisms that are currently carried by the Commission and the Court of Justice of the European Union?

Dr Christine Middlemiss: Many of the activities we undertake already, because we import directly from third countries and free movement of goods within the EU. One activity that we do not currently undertake, it's an EU competence, is the auditing of our control systems and, indeed, those of the third countries that we trade with - to give independent reassurance that we have the right control systems in place. and surety that we have the right control systems in place that are required. It is currently under consideration as to how we will undertake that, to give us the degree of independence that we want, and to give surety.

Baroness Sheehan: How will we undertake that as a third country?

Dr Christine Middlemiss: Yes, being a third country, to give others who trade with us that confidence, and also in terms of us having the confidence in the countries that we trade within terms of going to inspect them. How exactly that will work is under discussion, because there are a broad number of areas to cover, but we are well aware that that will have to happen in some form.

Professor Guy Poppy: Quite an important discussion in that space is about whether you strive toward what is called regulatory equivalence or outcome equivalence. There are often discussions between Europe and the US on risk assessment, and the ultimate decisions taken by risk managers, and one school of thought is that you should focus not on the process by which you get there but on the outcomes of equivalence.

The European system is often based on what is called regulatory equivalence, which is about making sure that the framework by which you get there is followed. That has big implications for inspection, because inspecting whether the end product is the same is a slightly different process from checking that the entire process to getting there was the same. These discussions are very live as we speak.

The Chairman: You have not mentioned chlorinated chicken.

Professor Guy Poppy: I would not dare bring that up here.

The Chairman: We have discussed chlorinated chicken already, so

perhaps we should not touch on that. Any further follow-up questions, Baroness Sheehan?

Baroness Sheehan: We have not touched on the enforcement mechanisms provided by the EU. Any thoughts on how we are going to proceed with that?

Dr Christine Middlemiss: The enforcement mechanisms flow from its audit and inspection function in asking us, "These are the deficiencies that we have detected. What are you going to do about them?", and ultimately you get to infraction. It is all part of the discussion about what an audit body and system and process will look like. It is a very live discussion, but we are exploring all the different options at the moment.

Lord Krebs: There was mention earlier of Rotterdam. When Rotterdam is no longer the major port of entry for goods coming to the UK via the EU, are we going to have to create our own Rotterdam?

Dr Christine Middlemiss: There is a lot still in discussion. We are planning for a range of scenarios at the moment in relation to imports and the final decision on the relationship with the EU will dictate the prescriptiveness and depth of some of those controls. It will be for individual traders to understand what best suits their businesses, whether they bring things in to Rotterdam and trade with the rest of Europe and then import on to the UK, or whether their business model structure better suits product coming directly into the UK. In terms of the risk management, we see little difference in the short term. We constantly look at the risks that are out there globally, and both EU legislation, and us mirroring that in controls, will want to deal with those. It will be up to the terms of the deal and the prescriptiveness as to how we do that.

Professor Guy Poppy: We are having extensive discussions with ports such as Felixstowe to explore the issues that they see as potential problems to them, and during negotiations and discussions ensuring that various infrastructure and technology interventions can help. We are beginning to explore how useful blockchain and things like that might be in offering assurance through supply chains.

The Chairman: It may not be in your area of knowledge or expertise, but in relation to the Rotterdam effect that you brought up, do you know whether most of the food and plant products that come through Rotterdam are transhipped and come through a conventional port like Felixstowe, or are they ro-ro and then come in through somewhere like Dover?

Professor Guy Poppy: I do not know. Rotterdam is quite interesting. Chatham House produced a global resource trade database, and you can look at the flow of any commodity from any country to any country. If you look at livestock coming into the Netherlands, for example, you can see that quite a bit of chicken comes in from Brazil, Thailand and countries like that. Obviously if you are an economist you could see

future markets, dealing directly rather than coming in through Rotterdam.

The Chairman: On the logistics side, I know they like to dump everything for Europe in Rotterdam and I regret that even Felixstowe is a minor port in terms of global economics.

Dr Christine Middlemiss: There are a number of products that go through further terms of processing. They may come in through Rotterdam and get processed further into different sorts of products before they are moved further around the EU. A lot of the supply chains are very complex.

Q31 **Viscount Ullswater:** What are the biosecurity information sharing and surveillance systems used in your sectors, and what would the impact be of not participating in or receiving those systems alone, both EU and perhaps international? Which bodies would you hope to retain membership of or be involved in post Brexit, such as the European and Mediterranean Plant Protection Organization?

Professor Nicola Spence: Currently, the UK is leading in the area of risk identification, assessment and mitigation, and it has world-class scientists developing diagnostic and surveillance methodologies with the aim of preventing pests from arriving and anticipating problems and stopping them.

The UK wants to continue to have that very high level of capability. There are networks within Europe that currently share information, but we want to continue to look globally at other networks. We work closely with the Quad countries—Australia, New Zealand, USA and Canada—which share information about surveillance and new threats and we want to continue to work closely with them as well.

We currently have access to a notification system called Europhyt for plant health whereby each Member State should notify everybody within 48 hours of finding a new pest or disease. The reality is it sometimes take more like six to seven days and is not perhaps as immediate. That is a useful resource, and we will have some access to that Europhyt data but perhaps not so immediately.

We also use European Food Safety Agency—EFSA—risk assessments to help inform our own plant health risks. My understanding is that they are all published and we will have access to those, perhaps again not quite so immediately. You mentioned the European and Mediterranean Plant Protection Organization—EPPO. The UK is a member of EPPO in its own right. We have been one of the founding members for decades and will continue to be a very active member. Many of my team sit on technical panels for EPPO and are helping develop international standards, diagnostic protocols and it is our intention that they will continue to do that.

The level above EPPO, which itself has 51 members (the EU 28, plus many other members in the Mediterranean and the Near East region) is the

International Plant Protection Convention, which sits above EPPO and is the international membership organisation. The UK is a member in its own right and has been since the 1950s, so it is a very strong founder of that international convention. Again, members of my team sit on technical panels and set standards, such as international standards on wood packaging material. We are very much engaged in that and will continue to be when we leave the EU.

Dr Christine Middlemiss: On the animal front, the UK is one of the world leaders in risk identification and assessment, and that applies to animals as well as plants. I mentioned the OIE, the animal version of the World Health Organization. It has a surveillance database. All members, as we are in our right, are obliged to submit identification of any of its listed diseases happening with its territory, and they are notified to other members and the UK will continue to be a part of that.

We are part of a number of formal and informal information-sharing networks through which we receive updates of various evidence bases. Our experts, understanding what is going on out there, are able to translate that for us and we will absolutely continue to be part of those. We also have experts sitting on standard-setting committees internationally, which helps to keep us up to speed on the current information.

We have a number of OIE Reference labs, which means that the OIE has approved our labs to a certain standard. We take samples from around the world to test them for confirmation of disease and so on, and we will continue to be part of that network. Likewise, we currently receive information from EFSA. Its risk assessments are published and there will be a delay in receiving those. I understand we are able to co-opt international experts, but we would not be a direct member as we currently are.

For animals, the EU has the Animal Disease Notification System, which provides updates of disease detections in Member States. Again, those are published so we will continue to receive those, but we may not receive them as quickly as we currently do as a Member State. Through our experts and researchers, we are on a number of informal networks within Europe and we strive to continue to be members of those as we move forward.

Viscount Ullswater: I have noticed that the Institute at Pirbright has now lost its bluetongue surveillance and it has moved to Spain. Is that going to affect the work at Pirbright?

Dr Christine Middlemiss: We have seven EU Reference Laboratories designated by the EU as being the standard-setting Reference Laboratories for the EU.

Viscount Ullswater: Will they all be designated?

Dr Christine Middlemiss: They will all be patriated into the EU. That relates to confirming disease. Our intention is to continue sharing the knowledge and expertise that those Reference Laboratories are so noted for, and we will continue to increase the number of OIE Reference Laboratories that we have to make up for that gap. Currently, that is our plan. We have another two coming on stream this year.

Viscount Hanworth: Are we liable to lose some of the personnel from these laboratories?

Dr Christine Middlemiss: It is possible, yes. Our intention is very much to continue to play an international role and, where appropriate, an EU role in expertise and science, and we hope that we will be able to develop job roles within that that will continue to attract the standards that we have, because that expertise is hugely important and valuable to me in making disease decisions and advice to Ministers.

Q32 **Lord Rooker:** Looking at the evidence that we have been provided with on EFSA, it has 10 scientific panels with about 200 scientists, 36 of whom are UK citizens. It is the biggest single group of any of the 28 members. They will no longer be eligible to serve on those panels, because they will not be EU citizens, so what is going to happen about that lack of input?

My second point, which is slightly related, is whether we will remain a member of RASFF—the Rapid Alert System for Food and Feed. It issues eight notices a day on average on food and feed around Europe, and we cannot afford a week's delay. If the animal and plant notices can be delayed, we are either in or out, but issuing 3,000 notices a year around the EU seems a big haul if we are no longer part of the system.

Professor Guy Poppy: I was going to mention RASFF, but the questions moved on. You are right: there are 3,000 notifications, and often several hundred following an initial note. You may recall the Fipronil in eggs incident last year. The RASFF notification followed by all the subsequent RASFF information enabled us to trace very quickly through the supply chain which products might be being affected.

There are two alert systems that are critical to how we currently operate. One is RASFF, which is not just within the Commission; you can pay to be a member of it and a lot of EFTA countries belong to it. Switzerland has access to part of the RASFF alert system.

Lord Rooker: It is just the EEA and EU. Norway, Iceland and Lichtenstein, but nobody else.

Professor Guy Poppy: INFOSAN feeds into the RASFF mechanism but does not get full access.

The other important system is the TRAdE Control and Expert System—TRACES. It is within Defra's responsibility to look at how to replace that, but it is very important in risk-based inspections to be able to know where products of potential high risk are coming in. Those two systems are very useful to us, as is the Food Fraud Network. You mentioned

olives, and if you get a reduction in the olive harvest, you tend to get an increase in fraudulent olive oil sales.

You may be aware of the rapid increase in the price of vanilla at the moment, which suggests that vanilla will probably be subject to fraudulent activity. Having access to those intelligence networks is very important to your ability to undertake your function. We are having extensive discussions with EFSA about ways forward. Sadly, you mention UK citizens being the principal people in those panels, but I have looked at the notification from EFSA on the new panel members who will be sitting between 2018 and 2021 and the UK has gone from the top country to the fifth country in that future panel representation.

Importantly, I want to flag the fact that the UK is in a very good position because of the incredible world status of its scientific endeavours, and whether we are talking about EFSA or other European organisations, it is one of the major, if not the major, contributors scientifically to those organisations, which perhaps enables us to sit here with some confidence and say that we can cope with X, Y, Z. If the UK's scientific base started to get threatened in some way, that is a very different issue and one that would really worry me.

Lord Rooker: We have gone from first to fifth without any negotiations taking place, and that is happening now?

Professor Guy Poppy: In the latest announcement from EFSA on the panel members, that is what you observe.

The Chairman: Can I just take up one point there? You mentioned food crime. We have not mentioned food crime in this inquiry before, but I presume the importance of food crime is that if you are doing something criminal, it is something that you would not want to import, or the temptation is there to import stuff that is not only not what it says, but could be a hazard to us in this area. Just briefly, give us a bit of context.

Professor Guy Poppy: It ranges from issues around something like manuka honey for which people are paying very high amounts of money for something which perhaps is not manuka honey—I mentioned vanilla—through to things which are perhaps more troubling in which, when the world commodity price of certain spices changes, you get adulteration with peanut of that spice, which obviously has an allergy issue associated with it.

Professor Nicola Spence: I wanted to come back on the point of eligibility on EFSA panels. We have seen the EFSA statement, but I think there is a provision in there if they wanted to invite a UK national to be an independent international expert. Certainly, we would be open to our staff continuing to have that status if they had a particular expertise that was important enough to EFSA, but it remains to be seen whether or not they will take up that option.

Dr Niall Moore: On our information system, we have an EU system called EASIN—European Alien Species Information System—which has a notification system called NOTSYS. The implications of us leaving those will be pretty slim, because EASIN has only been around since 2012 and is still finding its feet in relation to information. The NOTSYS system has only been working since 2016 and there have only been something like 28 notifications for 11 of the listed EU species. The implications of us not being part of those would be pretty minimal and we will still have access to the public-facing parts of it.

Q33 **Lord Krebs:** Professor Spence, you mentioned that after we have left the EU, there will be a delay before we get to see EFSA risk assessments. I just wondered how long the delay is, because, in some cases, I could imagine even a week or two could make a significant difference to the safety of our food system or biosecurity.

Professor Nicola Spence: EFSA publishes its reports once they have been agreed. What we might miss is some of the development, but our membership of EPPO is critical here, because EFSA and EPPO collaborate very closely. I would expect anything significant would be shared quickly with EPPO and hope that we would gain access through other means.

Lord Krebs: You would hope, but we do not know.

Professor Nicola Spence: That is true.

Professor Guy Poppy: In the majority of cases, an opinion from EFSA will translate to the UK.

Lord Krebs: Without a delay?

Professor Guy Poppy: There will be a delay until it is publicly on the web. I do not know how long that currently is. The issue which is worth exploring and something we have been discussing internally is, when it comes to risks associated with food, the exposure component of risk, which is to do with consumer behaviour, and how they cook and how frequently they have something, could be different from a generic EFSA risk assessment. Therefore, being able to see some of the underpinning data that it has used relating to the exposure element of risk would be something we would like to have in order to perhaps refocus a risk assessment to UK consumers only.

Q34 **Baroness Sheehan:** Something that was mentioned during last week's evidence session is that the informal relationships, for example among CVOs, that currently exist will be very difficult to maintain post Brexit. How do you think that might affect the way information sharing will pan out?

Dr Christine Middlemiss: Depending on what deal transpires, we will have different levels of access to the EU CVOs network. For example, Switzerland and Norway attend for certain parts of the EU CVOs' monthly meeting presently. Within those EU CVO meetings, the UK works very closely and formally with like-minded countries that are looking at the

same kind of risks the UK does—the Netherlands, Germany, France and so. I think there is an onus on me, in the animal world, to maintain those relationships and continue to work over the similar risks with the CVOs of those countries.

Professor Nicola Spence: We will continue to have relationships with Member States at an EPPO and an IPPC level and scientific relationships will remain as they are now. Scientific collaborations and partnerships are global and international and we rely on those to flag evidence and risk assessment to inform our policy decisions.

Q35 **Baroness Wilcox:** As you know, the movement of animal semen and embryos within the EU is currently facilitated by the TRAdE Control and Expert System, which digitises the certification process. How does biosecurity certification currently work in each of your sectors and will those arrangements need to be adjusted post Brexit?

The Chairman: I think an overview rather than a full technical description would be best.

Baroness Wilcox: I have been waiting ages. Take your time.

Dr Christine Middlemiss: The question was more orientated towards animals. A third country relationship means full certification depending on the trade agreement that you have and the standards that are part of it and that is based on disease equivalents and the risks of the country. With our current relationship with the EU live animals and germplasm, as you note, travel with an animal health certificate. Because the health status can change so rapidly they are certified usually 24, 48 hours before they leave. Products of animal origin are free to move around and the onus is on the country from which they originate to put in place controls if they have a disease issue.

The requirements for the future will depend on what the deal is and the relationship going forward; where we are on the spectrum from being a third country (and full certification) to being able to have some degree of a system of verification and assurance more akin to free movement. That is that system.

Baroness Wilcox: Is that it?

Dr Christine Middlemiss: Depending on where we end up with that, if we have the requirement for more certification we will need more systems and people in place to be able to provide that certification. If we have a process where we can use more technology to do that, we can do it in advance, so the certification requirements will be less onerous and will need fewer people to be able to do that.

Professor Nicola Spence: Similarly, for plant health the certification is carried out by the Animal and Plant Health Agency through the Plant Health and Seeds Inspectorate which currently does that. Depending on the various scenarios, we are planning around those in relation to what that would mean for issuing certificates, resources, et cetera. We are

engaging with our stakeholders and industry to understand what the implications of that might mean.

- Q36 **Lord Selkirk of Douglas:** The background to the question I am about to ask is that the British Veterinary Association has argued that additional inspection at ports will be necessary and the Prospect union has stated that there will need to be a large increase in plant health import inspectors to manage certification and physical checks on imports. What proportion of biosecurity inspections for material that ultimately enters the UK is done at EU rather than UK borders in each of your sectors? Does the United Kingdom have the capacity to conduct biosecurity inspections for items entering the UK from the European Union?

Professor Nicola Spence: In terms of plant health, we already receive about 2,500 plant health movement documents annually from the EU—plant passports—and we have targets for import inspections based on risk. For some commodities we will aim to do 100% inspection, and for lower-risk commodities we agree with the EU the level of inspection that we carry out. Under the various scenarios, we have been looking at resources in the Plant Health and Seeds Inspectorate and estimating what the requirements might be. We have developed plans to look at additional resource requirements and are now at the stage where we need to make some decisions about whether we are going forward with additional recruitments.

Lord Selkirk of Douglas: Are you confident that we will have the capabilities to deal with whatever may emerge?

Professor Nicola Spence: Yes, certainly. In our scenario planning we understand what the implications could be in relation to people and resources, and we have made provision to recruit inspectors and train them if necessary.

Lord Selkirk of Douglas: And vets?

Dr Christine Middlemiss: In relation to vets, it is something that I and the whole profession are very aware of. Currently, the profession has approximately an 11% shortage of vets. Within the food chain, a vast majority of vets working are of non-UK origin. Within Government, APHA and Defra, about 50% of our vets are of non-UK origin. We are very aware that if we have an increase in certification and inspection, there will be a requirement for even more vets. We are working very closely with the British Veterinary Association and the Royal College of Veterinary Surgeons on a number of measures, understanding why we have shortages, why there is a retention problem in the profession and very much working with the Home Office in relation to the Migration Advisory Committee and others to make them very aware of the potential shortages and how they can be addressed in their planning going forward. We had a project board for our joint committee yesterday and the Home Office was present at it so we could go back over that information. We are continuing to use every opportunity we have to make them aware that we rely heavily on non-EU origin vets. It's not

something that can be changed, an EU supply developed, in the short term and we want to continue to have access.

Professor Guy Poppy: Following on from that, that is one of the areas where the circle of Chief Scientific Advisers is flagging that veterinary issue together with the clinical medicine issue to feed into DExEU and others about these highly trained people, where it takes some years to get them to the necessary level of competence, and the current numbers in terms of who comes from outside the UK. That is another mechanism, together with the internal planning, which is being co-ordinated at quite a high level in government.

Baroness Sheehan: My question arises out of the Food Standards Agency's report on the preparation for Brexit. Throughout the report, there is a strong theme of plans being put in place to prepare for any eventuality. However, on the last page under "Key Risks", it talks about early decisions having to be taken to make proper plans so that it can discharge the function that it has been asked to discharge. Can I ask about the timelines? Are you satisfied that those decisions will be made in time to be able to put those plans in place?

Professor Guy Poppy: One of the critical issues to do with the Food Standards Agency is the repatriation of risk management decision-making. What is happening is officials between the Food Standards Agency, Defra and DHSC at Director General level are regularly meeting to explore what is going to be the best option in that space. There is a position being developed, which has not been finalised so it is not possible to say what it is at this moment in time, that from day one we will have a system in place in which risk management decisions are being made, which will evolve towards a steady state after a period of time. The day one issue is being planned as we speak. The officials tell me they are hoping to have that finalised in the next month or two so we know, with the risk management decisions from the Commission, when they come back in the Withdrawal Bill, that there is a part of government that has the authority to make those decisions.

The Duke of Montrose: If Brexit is implemented, are you of a mind to recommend to the Government that the plant passport will be an adequate hurdle for any imports from the EU, or do we need a strengthened inspection?

Professor Nicola Spence: The current system, on exiting the EU, of plant passporting will cease, but we believe that traceability is critical. We are looking at what the options might be at a national level to possibly have a national plant passporting scheme or some equivalent scheme whereby, when material arrives, we can issue a passport and have full traceability within the UK for the life of that plant.

The Duke of Montrose: The EU produces passports at the source. We do not think they will be acceptable?

Professor Nicola Spence: What the EU will have to do is issue a phytosanitary certificate, because if we are treating them as a third country, material will arrive with a phytosanitary certificate, it goes into our national system and we can convert that into a passport or some kind of national traceability document so that we have full traceability.

The Chairman: Are the IT systems up to that?

Professor Nicola Spence: Unlike TRACES, which is an EU system, in plant health we have a national system called eDomero which we built ourselves. We have been looking at its operability under various scenarios and testing it to see if it can cope with increased volumes and the supplementary requirements. We believe that we need to invest in some adjustments to it, but it should be robust and able to function from day one. That is currently the basis of our planning.

The Chairman: It is better than TSB on that one, you hope.

Professor Nicola Spence: Currently it is functional. We will continue to test and examine it under the various scenarios so that we can confidently use it.

The Chairman: Do you feel confident about it?

Professor Nicola Spence: Yes. I think we have done a very high-level amount of testing. It is flagged as a priority for some investment to make sure that the system is robust.

Q37 **Lord Krebs:** This is a question about additional resources. We have already heard from Guy Poppy about the repatriation of risk management, and the possibility of increased veterinary and plant health inspection requirements. Are you confident that the resources will be made available to the relevant departments or public bodies to carry out these additional functions? Picking up on what Baroness Sheehan asked: will they be ready in time? We only have 10 months to go now, so not only do resources need to be provided, but your bodies and others have to use those resources to set up the systems. Are the resources available and is there time before 29 March 2019?

Dr Christine Middlemiss: Defra is in the process of taking on another 1,250 staff to help deal with all the implications that come forward. The veterinary one is a real one and we do not have the answer to that. We know that, people here from the EU currently will be able to stay on, and that is great, but we are still working on how we deal with the increased requirement for vets.

Lord Krebs: The short answer is you do not yet know.

Dr Christine Middlemiss: No.

Professor Guy Poppy: The Food Standards Agency has been given the money to do two things which are very critical. First, it has taken the National Food Crime Unit into what was called phase 2, so the initial work

has been creating an intelligence unit which would pass that intelligence over to other law enforcement organisations to prosecute. The decision has been taken and money has come from the Treasury to turn it into a law enforcement organisation, which, in terms of fraudulent activity, means we will be more capable of dealing with that particular issue.

The other part of the organisation which is receiving significant amounts of money in terms of staff increase is the risk assessment aspect to be able to undertake risk assessments within the UK as against contributing to that which is undertaken in Europe. You are right to flag the fact, and indeed it is another issue the Chief Scientific Adviser group has noted, that if you take certain professions, such as chemical toxicologists, there are not many around and they are very attractive in the pharmaceutical industry.

In government departments that need toxicologists, having the money to employ one is phase 1. The next aspect is trying to encourage those people to join an organisation such as the Food Standards Agency to do chemical risk assessments of food. We are working very hard to try to understand who is out there and using networks to try to encourage people. The Government's Office of Scientific and Engineering Profession is exploring ways of trying to create a new cohort of risk assessors.

Lord Krebs: This is worrying to me. With 10 months to go, you are working hard and exploring possibilities. I would hope with 10 months to go you can see the home straight and know how you are going to get down the home straight in time. I do not get the sense that that is where we are yet.

Professor Guy Poppy: The money from the Treasury has only recently been announced. We are now in the phase of trying to fill those posts.

The Chairman: On the food crime issue, is that something Europol deals with, particularly?

Professor Guy Poppy: Andy Morling, who heads the UK National Food Crime Unit, has established global and European organisations that focus on food fraud. He comes from the National Crime Agency, so he is well connected to some of those other organisations. Often, with those organisations which have a vast amount of stuff to deal with, the issue has been giving them the reason as to why they would pursue a food issue as against something else.

The Chairman: I understand. Can I come back to something you talked about earlier on, which is around having to audit third country producers? Are we going to have to have roving, air miles consuming inspectors going around the globe doing work that is currently done by the Commission? Are they ready to fly, as it were?

Dr Christine Middlemiss: In the animal space it will very much depend on where our trade deals end up. We have bilateral agreements already. The EU undertakes a lot of that inspection. They publish those. How much

do we want to continue to rely on those? It will be where we develop new trade agreements outwith those that we have been used to, and the level of inspection we need for those.

The Chairman: To clarify that, for the third-party FTAs—56 countries, 40 agreements—is there an expectation that we might still be able to piggyback off the EU on those?

Dr Christine Middlemiss: The reports are published. There is also the OIE which does independent inspection and so forth. There are a number of information sources out there that provide you with some evidence about the systems in those countries you are trading with. In terms of actual plants producing meat and so on, we may want to go and independently inspect those. It is not just the resource; it is having the expertise to do that. We have a number of people who have supported EU audit missions before, but not a huge number of people.

The Chairman: How many people will we need to do that function? Have a guess. Are we talking about tens, a handful, a hundred?

Dr Christine Middlemiss: At a guess, it would be tens.

Professor Nicola Spence: The SANTE F unit in the European Commission that does this with plant health controls has about 10 people in a unit that covers the whole world. Similarly with animal health, the UK provides a number of inspectors to participate in those audits. Our inspectors are always in demand to go and audit in India and Ghana, or wherever is required.

The Chairman: That is fine. Professor Spence, you said you are at the stage of needing to make decisions about resources. I am trying to get clarification of that. Is there something getting in the way of those decisions? Is it understanding what the future relationship is? Is it about to be decided or resolved? Where are we?

Professor Nicola Spence: Obviously, we have talked about planning for the various scenarios. We have put options to Ministers. It is clear there are resource requirements around various options. I think we need clarity about the trading relationship.

The Chairman: This is not a political question. It is around deciding what the future relationship should be and then you can fit the resources around that?

Professor Nicola Spence: Exactly. And depending on that, we have resource plans that will deliver those requirements.

Dr Christine Middlemiss: To add to that on the vet front, whatever the scenario we will need more vets. Which scenario will depend on the scale of the numbers we need.

The Chairman: We are going to move on to devolution. Lord Rooker.

Q38 **Lord Rooker:** In my time and in John's time, the police were never interested in following up food crime. Things have changed dramatically in recent years. There has been a culture that it was not important. Other things were important. Now, it has been beefed up and that is important.

The Chairman: Unfortunately, it is obviously growing and hence why it is important to this issue, yes.

Lord Rooker: Yes. Professor Elliott identified a lot of gaps. Basically, I wanted to speak with you about devolution and the issue within Great Britain and, in particular, the island of Ireland. There is quite clearly already a border down the North Sea, contrary to what is alleged, in respect of biosecurity, animal health and animal disease. There are quite clearly separate arrangements there. The EU has issued a notice, has it not, recently, saying no live animals into the EU from the UK unless they follow third country procedures? That means border posts and checks, so we have a problem with animals across the border in Northern Ireland. In terms of biosecurity, as I recall, we do not import raw chicken into this country any more, it is all cooked. What will happen across the border within Great Britain? Is there anything to be changed? Millions of tonnes of chicken coming from the Far East is all cooked now, as I understand it. Is that a problem internally for us?

Professor Nicola Spence: I will start by explaining the current devolution requirements and my colleagues can answer the specifics. GB essentially functions as a single epidemiological unit, which means that pests and diseases do not recognise administrative boundaries. As Christine has already mentioned, in the Chief Veterinary Officer's network and in the Chief Plant Health Officer's network, we work together to co-ordinate biosecurity arrangements. While policy is devolved to England, Wales and Scotland, we work closely to ensure a co-ordinated position in terms of plant disease controls. We do have those arrangements already in place and we would anticipate continuing to do that.

Interestingly, there is an all-Ireland approach to plant health between Northern Ireland and the Republic of Ireland. They recognise the island of Ireland as a single epidemiological unit and work collaboratively to ensure, while they have their own policies, that things are co-ordinated well on the island. Obviously, as the four administrations of the UK, we also work closely with Northern Ireland to look at plant health arrangements and biosecurity. I will allow you to answer the animals question.

Dr Christine Middlemiss: Similarly, we have GB as one epidemiological unit, we recognise that farmers and processors trade up and down Scotland, England and Wales, and you have one epidemiological unit of Northern Ireland and Ireland, with a huge amount of animal movements up and down, though there are a number of animal movements from Northern Ireland to Scotland and so on into the north of England. At the moment, within the UK— because that is how we are seen internationally—we can have requirements in moving from GB into Northern Ireland. For example, sheep are required to be tested for maedi

visna when being moved. It is not a notifiable disease but it is a disease that Ireland is free of and they quite rightly say, "We want to know if we are likely to import any sheep from there".

As you will be aware, there is a huge amount of work going on on how the island of Ireland will work in terms of trade impacts, political impacts and movements in the EU, third country status and so on. I understand our officials are feeding into that heavily to feed in the technical impacts of the different scenarios and how that may work. At the moment, there is some transit from Ireland through the UK to the continent and how those trade patterns might be impacted by different scenarios and the implications of different scenarios in terms of certification. Ultimately, in terms of the diseases we really worry about, such as foot-and-mouth disease and African swine fever, we are all free of those, so on a day one scenario the disease risk will not have changed.

Professor Guy Poppy: The Food Standards Agency does cover England, Wales and Northern Ireland too. We have a very good working relationship with the new Food Standards Scotland organisation. Currently, food laws are largely harmonised across Europe. Most of the decisions come from Europe. Of interest, looking forward, is potentially whether the risk management and the risk appetite of the devolved administrations are uniform on particular issues. For instance, an area where we have made a risk management decision, being unpasteurised or raw drinking milk, the Scottish view on that is different from England, Northern Ireland and Wales. The FSA and the FSS differ on that particular issue. Similarly, with serving burgers that are served less than well-cooked—so-called rare burger—again, Food Standards Scotland has a different risk management based on its risk appetite from the rest. We are all working to the same risk assessment, but the ultimate decision-making can be different. Currently, we are harmonised. We spend a lot of time talking to the public—the consumer—and private sector. Clearly, they would quite like as harmonised a system as possible. It makes their lives much easier and makes messaging to the public much easier. The issue is when risk management decisions come back you can get different decisions based on exactly the same risk assessment, depending on risk appetite.

Dr Niall Moore: On the invasive species side, we have much looser arrangements than, for instance, our plant and animal health colleagues. We do have co-ordination across GB—England, Scotland and Wales, obviously—and Northern Ireland works very closely with the Republic. We also have the British-Irish Council. Its environmental element has been looking at invasive species issues since 2013. Ministers recently agreed to launch a joint biosecurity campaign at the border, with a public awareness campaign to stop aquatic invasive species spreading across a big area.

Lord Rooker: I want to come back on the point that you raised, Christine, on travel between the Republic of Ireland and Europe, because they travel through the UK. Even when the beef ban was on, the beef

was going. In terms of biosecurity, what about the Isle of Man? During the beef ban, they were exporting beef to Europe. They were not covered by the beef ban. The fact is they were producing food. On biosecurity, the island of Ireland is separate. GB, another island, separate. We have this food producing island in the middle which has a different status but it does export to Europe. How is that dealt with?

Dr Christine Middlemiss: Interestingly, we were discussing yesterday about how the Crown dependencies evidence and show disease freedom in order to be able to trade at different levels. It is being discussed. I do not have a specific answer to it. There is disease freedom that is discussed at EU level, and then at OIE level and the evidence you have to provide for that. There are different scenarios and options that they can follow within that.

Lord Rooker: I do not think the Isle of Man has an abattoir operating any more. The animals have to go somewhere to meet their maker.

Dr Christine Middlemiss: Yes.

The Chairman: The EU Committee has looked at Crown dependencies. It is one issue that perhaps you could come back and give us some written evidence on. That would be useful. Did you want to say something very briefly, Professor Spence?

Professor Nicola Spence: At a plant health level, we have a UK co-ordination group, which includes the Isle of Man, Guernsey and Jersey. We recognise the Crown dependencies as being part of the epidemiological unit. We meet with them at least twice a year to formally discuss disease arrangements. Indeed, we often support them when they have problems as they do not have that much capacity.

The Chairman: Some further information would be very useful on that.

Q39 **Viscount Hanworth:** Are there steps the UK can take post Brexit to strengthen its biosecurity in ways currently prohibited by European Union membership? One could turn that question around and ask: what are the existing possibilities for gold-plating the European Union legislation? What are the restrictions on doing so that we might wish to alleviate?

The Chairman: Very briefly, going along the panel, what opportunities do we have that we did not have before? Very briefly, could you give us bullet points of what they might be? We are quite interested in any other examples of international best practice. You mentioned the Quad, which I have not come across in terms of this particular context. Professor Poppy, shall we start with you and work along? What can we do better?

Professor Guy Poppy: Again, this is a conversation that the Chief Scientific Advisers had recently to do with chemical safety, medicine safety and food safety. It is more to do with the risk management function, in which the UK tends to take a more risk-based approach in its management than some parts of Europe which adopt a more precautionary principle, a somewhat hazard-based aspect, to

management. We see that in examples, for instance, to do with GM, in which the risk assessments that EFSA undertake with GM largely give GM, whether it be food or growing and releases to the environment, a low risk or equivalent risk to a non-GM product. Yet the Commission very rarely reaches a majority vote in terms of allowing that particular product to go to market or to be grown in the environment. In terms of an opportunity, the risk management aspect perhaps can put a stronger emphasis than perhaps is the case currently on the scientific risk as against just thinking about the hazard.

Viscount Hanworth: Previously, we were discussing the issues in terms of the Epitrix flea and Spanish potatoes, where the European Union did not wish us to be more stringent. Are there many examples where we would naturally wish to be more stringent than the European Union, and yet we are prohibited from doing so?

The Chairman: Sorry, Viscount Hanworth, I am interfering. I understand that. Perhaps we could work along the panel in terms of things we can do better and come back on a supplementary. Can we do that?

Viscount Hanworth: That was exactly the tenor of the question I was posing to Nicola.

Dr Niall Moore: Our EU invasive species Regulation allows us great flexibility so long as we can support the action we take at Member State level with a comprehensive risk assessment. We already have a very comprehensive risk assessment mechanism in place. However, we will be able to better tailor any restrictions we want to UK needs rather than European needs. Some of the species listed at the moment are not threats to the UK. We are taking action on those even though they do not pose a threat to the UK. In terms of exemplars, on the invasive species side, we look to New Zealand. The situation is different; it is a smaller country with less trade than we have and further away from other sources, but it has a very highly integrated system across plant health, animal health and invasive species. It is clear to say that in the UK, we have been doing this since 2013. Christine mentioned the monthly biosecurity meetings where we assess all the risks and bring them to Ministers in Defra every month so they can see the risks across the piece from animal health, plant health and invasive species. We are getting there.

The Chairman: Should we keep the EU lists that we have at the moment while doing that?

Dr Niall Moore: Yes. Most of the species on the list do pose some threat to us. With climate change, some, in the future, may also pose a threat as well. There are a few species which I think I would be pretty unsure about keeping.

Dr Christine Middlemiss: Very similar for me. It gives us the opportunity to better tailor the actions to our disease risks. There are a number of areas where we might want to take increased action quicker

than the EU has done. In terms of best practice, again, New Zealand and Australia for us. They have smaller populations, are bigger countries, have more extensive grazing, but it is interesting to look at their legislation, which is very generic in Australia. The Biosecurity Act covers all four of these disciplines and is based on the principle of anybody who undertakes an action that may create a biosecurity risk ought to be reasonably aware of that risk and take appropriate action—so much more outcome-focused and proportionate and less prescriptive. How the Government and industry integrate to manage disease control risks, make decisions and fund disease control would be opportunities for us to look at.

Professor Nicola Spence: For plant health, we would like to be able to make decisions more quickly based on risk, but to take decisive action and not have to wait for the EU timetable, which often is slow and somewhat frustrating. The case of Epitrix was quite a challenge, but we were very determined. I was lobbied by a delegation from Spain, including the ambassador in London and various technical people. The chief vet was involved in that as well. A lot of pressure was applied for us not to take national measures, but we were determined, and, with ministerial support, we continued on that path.

Right now, with Xylella, we have some real concerns that not enough action is being taken in Europe. Last week some new evidence came to light of the possibility that Xylella was being moved in the trade of an ornamental plant called Polygala. As soon as we received this information, I wrote immediately to the Commission requesting that they immediately prohibit the movement within and into the European Union of this host. I managed to gain support from several other Member States. They still want to have another discussion. It will be discussed at standing committee next week. I find myself again waiting. Meanwhile, we are looking at national measures so we can act quickly.

Viscount Hanworth: Typically, how long do you have to wait? In the Spanish potato case, was it days or months?

Professor Nicola Spence: We are talking about months. In that case, months can be critical.

Viscount Hanworth: Absolutely.

Professor Nicola Spence: It depends on the growing season. Potatoes are planted in early May, generally. You need to have action in place before that critical time. In terms of Polygala, it is an ornamental plant. We are getting to nurseries selling attractive plants to householders on Bank Holidays, people want to go and purchase. We need to take action now.

Viscount Hanworth: Could you not take action until the action had been sanctioned by the European Union?

Professor Nicola Spence: Ideally, we want all Member States to agree. If that is not forthcoming we will take national measures.

Viscount Hanworth: Pre-emptively.

Professor Nicola Spence: Yes. In terms of other things we would like to do, I have concerns about passenger movements of plant seeds, cuttings et cetera. At the moment, people can come back from their holidays and bring things in their suitcases and we do not have powers to act. I would like us to be doing more in terms of passenger allowance. On the counter to that, we spend a lot of time inspecting things that are very low risk to the UK: for example, citrus. We have to carry out extensive inspections because they are of concern to other Member States. Obviously, things might come into the UK and end up in Europe. We have also been looking at what things we might deregulate: as a result of leaving the EU, what things might we not be required to do any more and what would not present a risk to the UK.

The Chairman: Generally, that means that the EU will make our border with it un-frictionless, does it not?

Professor Nicola Spence: There is a challenge around transit goods. At the moment, with things that enter the UK and are destined for Spain, we do the inspections and vice versa. If material is entering through another Member State and is destined for the UK, we will have to carry out those additional checks if that is part of our risk-based approach to import controls.

Lord Young of Norwood Green: What you seem to be telling us is that even when you have the scientific evidence, politics is attempting to override it.

Professor Nicola Spence: At a European level?

Lord Young of Norwood Green: Yes.

Professor Nicola Spence: Yes. Certainly, people want to protect their trades. Our job as providers of robust evidence and risk-based approaches is to show there is a problem with those supply chains that therefore justifies action. Some Member States will question that evidence. It is our job, as risk advisers, to make sure that that is as robust as possible so we can get that support.

Lord Young of Norwood Green: That applied to GMO as well, did it not, if I heard correctly?

Professor Guy Poppy: It did, although that was complicated by the invoking of the precautionary principle to do with uncertainty around some aspects of the science, which, in some ways, was misused and abused. In that case, it would have been better to say, "There is a whole range of other lenses or value judgments being made which is affecting your decision, but the risk assessment is telling you that this is low risk or safe as an equivalent".

Lord Rooker: I want to support what you said about passengers. Did any of you hear "Gardeners' Question Time" from Kew on Sunday? A questioner had a question about a cutting he had taken from a hotel garden in Spain, and yet nobody on the panel said, "You should not have done that". We need to have a chat with the BBC. They are up the wall on that. I know from my own experience as a Northern Ireland Minister that the checks are very good in Belfast. I have visited New Zealand a couple of times and they take it seriously. I never really think that we take seriously in GB the private imports of fresh meat, believe it or not, from the Caribbean. When I was in the Home Office, I used to go to the airport when the Jamaica plane would come into Gatwick and people were bringing things in in their suitcases that could be importing massive amounts of disease.

The Chairman: At the moment, because of the Single Market, are you legally allowed to bring any cuttings in from Spain? You can just bring them in, presumably.

Professor Nicola Spence: Yes, it is allowed.

The Chairman: It is allowed. That is something now that we could control more post Brexit. That is what we are trying to get to.

Professor Nicola Spence: Yes. Part of the new EU plant health Regulations are making a provision to have more control over the passenger concession. We would like to see more work done to enforce that and raise public awareness, and programmes such as "Gardeners' Question Time" could be more helpful.

The Chairman: There is one area I want to deal with very briefly that we have not dealt with at all, which is around transition. I would particularly like to ask Professor Poppy this. As I understand it, under the transitional agreement, we are subject to everything that goes on in the European Union, all the decisions that are made, but we have no say and we have no representation, except in a small area of quotas on fisheries. In somewhere such as the European Union Foods Standards Agency, can that relationship work over that transition period? Rather than meetings to decide those things, will it mean they will just send you a text or fax and that is it? How do you see that working? Have they even thought about it?

Professor Guy Poppy: We have had many meetings with Bernhard Url, who is the chief executive of EFSA, about the future relationship. It is fair to say that EFSA and the FSA want as close a relationship as possible moving forward. In terms of that future arrangement, the issue is that in spite of the slight reduction in the number of UK experts, going from first to fifth still means we still have a significant number on the panel and there is a UK input into the scientific assessment process in those Committees.

A lot of the information that those panels are using to develop their opinions is based on published material, of which the UK is a leader, in

terms of generating that amount of material. In the past, if there were very UK-specific issues we would have been able to flag to EFTA to prioritise putting a significant amount of effort in. To give you an example, we worked with several other European countries to flag up that hepatitis E was an emerging issue that should be looked at. Clearly, in that transition period, we will not have such a loud voice in terms of saying this should be a major priority. Even when it comes to hepatitis E, the Germans and the Danes, et cetera, were also making a very loud noise. It is quite unlikely that if such a UK-specific issue arose no other Member State would be wanting to raise that at EFSA.

The Chairman: At that point, I will thank you all very much indeed for the evidence that you have given today. It has been very useful to us indeed. If we could follow up on the Crown dependencies, that would be useful. The other thing I would quite appreciate is protection zones which Professor Spence mentioned. I do not know how many of these exist.

Professor Nicola Spence: 24.

The Chairman: Could you send us some details of what those zones include and what they are about, preferably not completely in the Latin language that I am not necessarily so good at.

Professor Nicola Spence: While protective zones are an EU instrument, we are looking at essentially converting those into pest-free areas, which is an international instrument that we legally would be allowed to use, so where we want to maintain protections against certain pests and diseases we have that possibility to create pest-free areas to replace our protective zones.

The Chairman: As well as giving me the list with some English names, perhaps you could also provide a paragraph on that. It would be useful.

Professor Nicola Spence: Yes.

The Chairman: Thank you all very much for your evidence and I bring this public session to a close.