



HOUSE OF LORDS

European Union Committee

21st Report of Session 2017–19

Brexit: plant and animal biosecurity

Ordered to be printed 9 October 2018 and published 24 October 2018

Published by the Authority of the House of Lords

HL Paper 191

The European Union Committee

The European Union Committee is appointed each session “to scrutinise documents deposited in the House by a Minister, and other matters relating to the European Union”.

In practice this means that the Select Committee, along with its Sub-Committees, scrutinises the UK Government’s policies and actions in respect of the EU; considers and seeks to influence the development of policies and draft laws proposed by the EU institutions; and more generally represents the House of Lords in its dealings with the EU institutions and other Member States.

The six Sub-Committees are as follows:

Energy and Environment Sub-Committee
External Affairs Sub-Committee
Financial Affairs Sub-Committee
Home Affairs Sub-Committee
Internal Market Sub-Committee
Justice Sub-Committee

Membership

The Members of the European Union Select Committee are:

<u>Baroness Armstrong of Hill Top</u>	<u>Lord Jay of Ewelme</u>	<u>Lord Soley</u>
<u>Lord Boswell of Aynho (Chairman)</u>	<u>Baroness Kennedy of The Shaws</u>	<u>Baroness Suttie</u>
<u>Baroness Brown of Cambridge</u>	<u>The Earl of Kinnoull</u>	<u>Lord Teverson</u>
<u>Baroness Browning</u>	<u>Lord Liddle</u>	<u>Baroness Verma</u>
<u>Lord Crisp</u>	<u>Baroness Neville-Rolfe</u>	<u>Lord Whitty</u>
<u>Lord Cromwell</u>	<u>Baroness Noakes</u>	
<u>Baroness Falkner of Margravine</u>	<u>Lord Risby</u>	

The Members of the EU Energy and Environment Sub-Committee, which conducted this inquiry, are:

<u>Lord Cameron of Dillington</u>	<u>Lord Rooker</u>	<u>Viscount Ullswater</u>
<u>Lord Curry of Kirkharle</u>	<u>Lord Selkirk of Douglas</u>	<u>Baroness Wilcox</u>
<u>Viscount Hanworth</u>	<u>Baroness Sheehan</u>	<u>Lord Young of Norwood Green</u>
<u>Lord Krebs</u>	<u>The Earl of Stair</u>	
<u>The Duke of Montrose</u>	<u>Lord Teverson (Chairman)</u>	

Further information

Publications, press notices, details of membership, forthcoming meetings and other information is available at <http://www.parliament.uk/hleu>.

General information about the House of Lords and its Committees is available at <http://www.parliament.uk/business/lords>.

Sub-Committee staff

The current staff of the Sub-Committee are Alexandra McMillan (Clerk), Jennifer Mills (Policy Analyst) and Sally Dray (Committee Assistant).

Contact details

Contact details for individual Sub-Committees are given on the website. General correspondence should be addressed to the Clerk of the European Union Committee, Committee Office, House of Lords, London, SW1A 0PW. Telephone 020 7219 5791. Email euclords@parliament.uk.

Twitter

You can follow the Committee on Twitter: [@LordsEUCom](https://twitter.com/LordsEUCom).

CONTENTS

	<i>Page</i>
Summary	3
Chapter 1: Introduction	5
What is biosecurity?	5
Why is biosecurity important?	5
How is biosecurity currently managed in the UK?	6
About this inquiry	7
Chapter 2: Legislation	8
Food law	8
Invasive non-native species law	10
Box 1: EU Regulation 1143/2014 on Invasive Alien Species (IAS)	10
Plant health law	12
Box 2: Regulation (EU) 2016/2031 on protective measures against pests of plants	12
Animal health law	13
Box 3: Regulation (EU) 2016/429 on transmissible animal diseases	13
Enforcement	13
Chapter 3: UK-EU cooperation	15
Why cooperation is important	15
Shared intelligence	16
Disease notification systems	16
Box 4: ADNS, RASFF, EASIN NOTSYS and EUROPHYT TRACES	16
Box 5: Trade Control and Expert System (TRACES) The Working Party of Chief Veterinary Officers	19
The Working Party of Chief Veterinary Officers	20
Risk assessment and risk management	21
Research collaboration	22
EU Reference Laboratories	24
Box 6: Reference Laboratories	24
Funding	26
Box 7: LIFE Programme	26
Chapter 4: Trade and inspections	27
Tracing movements	27
Tracing plants	27
Box 8: Plant passports and phytosanitary certificates	27
Tracing animals	28
Import inspections	28
Minimising the need for inspections	28
New risks	30
Audits outside the UK	31
Chapter 5: Staff	32
EU Veterinarians	32
Public sector capacity	33
Biosecurity specialists	34
Border inspections	34
Training	35

Chapter 6: A pan-UK framework	36
Current differences in approach	36
A UK framework	36
Action so far	38
Island of Ireland	39
Chapter 7: Improving the UK's biosecurity	42
Problems with current biosecurity arrangements	42
Possible improvements	42
Taking action faster	42
Taking UK-specific action	43
Additional restrictions	44
Alternative approaches	45
Australia and New Zealand	46
Summary of conclusions and recommendations	48
Appendix 1: List of Members and declarations of interest	53
Appendix 2: List of witnesses	55
Appendix 3: Glossary	58

Evidence is published online at <https://www.parliament.uk/brexit-plant-animal-biosecurity/> and available for inspection at the Parliamentary Archives (020 7219 3074).

Q in footnotes refers to a question in oral evidence.

SUMMARY

Effective biosecurity measures are critical to protecting animal health, plant health and human health. This, in turn, protects our environment, our economy and our food supply chain. Recent history shows the devastating impact that the spread of animal and plant diseases can have. The 2001 foot and mouth disease outbreak in the UK led to more than six million animals being slaughtered and is estimated to have cost over £8 billion. The outbreak of Dutch elm disease that began in the 1960s destroyed millions of elm trees in the UK, and now there are fears that the current outbreak of ash dieback could kill half of the UK's 120 million ash trees.

Biosecurity measures range from banning the import of animals or plants that are considered to pose a particular risk; inspections at borders, farms and nurseries; imposing quarantines; treating or destroying affected plants and animals; and monitoring emerging disease risks worldwide. The UK currently follows EU legislation on biosecurity, with decisions on implementing biosecurity measures made predominantly at an EU level. The UK also benefits from EU-wide intelligence gathering and disease notification systems, systems for tracing plant and animal movements, and coordinated research efforts. When the UK leaves the EU, it will no longer automatically be part of this framework.

Geographical proximity means that the EU will always be a key source of biosecurity risks to the UK, and so shared intelligence and continuing cooperation post-Brexit will be essential. In summary, we have identified at least seven areas where Brexit could lead to a shortfall in the UK's biosecurity:

- Access to research funding;
- Enforcement of biosecurity legislation;
- Information sharing;
- Capacity in the veterinary sector;
- Inspections and audits;
- Capacity within Government departments and agencies; and
- The legislative framework.

We urge the UK Government to negotiate continued participation in as many of the EU's notification and intelligence sharing networks as possible. We note also the significant work that remains to be done to ensure the UK has a replacement legislative framework in place, along with the monitoring, inspection and enforcement mechanisms, staff and IT systems to support it, by the time the UK leaves the EU. It seems doubtful this could all be achieved by March 2019, when it would be needed in the case of a 'no deal' Brexit, potentially leaving the UK's biosecurity compromised.

On the other hand, leaving the EU also offers the UK the opportunity to improve its biosecurity, for example by tailoring lists of restricted species to better reflect the risks posed to the UK, or increasing checks at ports and airports. Such measures, however, are likely to conflict with the Government's stated intention of continued frictionless trade with the EU. It is likely that the only way the free-flow of goods could be maintained is for the UK to remain aligned with the

EU's biosecurity policy and legislation, even if it can no longer influence it: any deviation in standards or practice would result in the EU insisting on additional checks and paperwork for UK products while any more stringent measures the UK sought to introduce would, by their very nature, restrict the movement of goods across UK-EU borders. The need to facilitate trade post-Brexit must not be allowed to compromise the UK's biosecurity.

Brexit: plant and animal biosecurity

CHAPTER 1: INTRODUCTION

What is biosecurity?

1. Biosecurity is variously defined as “protection against the incursion or escape of potentially harmful or undesirable organisms, especially pathogens”,¹ and as “a strategic and integrated approach to analysing and managing relevant risks to human, animal and plant life and health and associated risks for the environment”.² These organisms can enter the UK via land, sea or air. For the purposes of this report, we have focused on measures to prevent the spread of disease in animals and plants, and the spread of invasive non-native species. We have not included any consideration of measures to prevent bioterrorism or other intentional malicious uses of biotechnology or biological agents.

Why is biosecurity important?

2. The Royal Society of Biology told the Committee: “Biosecurity breaches at a local or national scale can have profoundly negative effects on the economy and society as a whole; the 2001 Foot and Mouth Disease (FMD) outbreak is a case in point.”³ A National Audit Office report on that outbreak estimated that the direct cost to the public sector was over £3 billion and the cost to the private sector over £5 billion; more than six million animals were slaughtered.⁴
3. Dr Matt Elliot, Conservation Adviser at the Woodland Trust, cited Dutch elm disease, which within a decade of its introduction in the late 1960s led to the death of approximately 20 million of the UK’s 30 million elms.⁵ Dr Elliot made the striking point that, in the UK, “the generation born in the 1980s ... will never have seen a mature elm tree in the landscape”.⁶ Dr Paul Walton, Head of Habitats and Species at RSPB Scotland, told us that invasive non-native species have been the “primary cause of bird extinctions globally over the past few centuries”.⁷
4. These examples show the impact that plant and animal diseases have had in the past, but the threat remains high today. Dr Elliot told the Committee that “a recent study identified 47 pests and diseases that are present in Europe which, if they got to the UK, would cost over £1 billion to clean

1 Oxford English Dictionary: <http://www.oed.com/view/Entry/273827?redirectedFrom=biosecurity&> [accessed 25 July 2018]

2 International Food Safety Authorities Network, *Biosecurity: An integrated approach to manage risk to human, animal and plant life and health* (March 2010): http://www.who.int/foodsafety/fs_management/No_01_Biosecurity_Mar10_en.pdf [accessed 25 July 2018]

3 Written evidence from The Royal Society of Biology ([PAB0035](#))

4 National Audit Office, *The 2001 Outbreak of Foot and Mouth Disease* (June 2002), p 1: <https://www.nao.org.uk/wp-content/uploads/2002/06/0102939.pdf> [accessed 25 July 2018]

5 Forestry Commission, *Dutch elm disease*: <https://www.forestry.gov.uk/dutchelmdisease> [accessed 25 July 2018]

6 [Q 14](#)

7 *Ibid.*

up”.⁸ Dr Walton stated: “The Government’s estimate of the cost of invasive species, which was made getting on for 10 years ago now, is £1.7 billion per year.”⁹ And Professor Nicola Spence, Chief Plant Health Officer at the Department for Environment, Food and Rural Affairs (Defra), told us:

“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 ... Last year, for example, over 300 different pests and diseases were intercepted at our borders.”¹⁰

5. **Plant and animal diseases, and invasive non-native species, are a constant threat to the UK’s ecology and economy. Ensuring effective biosecurity measures are in place is therefore of great and lasting importance.**

How is biosecurity currently managed in the UK?

6. Most of the UK’s legislative framework on biosecurity, and the systems and processes in place to manage biosecurity risks, comes from the EU.
7. EU legislation includes a range of measures aimed at preventing the spread of disease, including “targeted surveillance, movement controls and eradication strategies”,¹¹ and agreed lists of species that are “deemed so potentially harmful to the EU that their presence and use in the EU is highly restricted”.¹² Having common standards and controls means that plants and animals (and plant and animal products) can move freely within the EU Single Market; stricter controls are then in place for imports from non-EU countries.
8. EU legislation is discussed in Chapter 2 of this report; inspections and trade in Chapter 4.
9. As a member of the EU, the UK is also part of shared disease notification systems, and systems that monitor plant and animal movements. Risk assessments and risk management decisions in relation to animal and plant health, food and food safety are all undertaken at an EU level. These systems and processes are addressed in Chapter 3.
10. EU legislation is, in turn, based on international agreements established by the World Trade Organization (WTO). The Organisation for Animal Health, the Codex Alimentarius Commission and the International Plant Protection Convention all set international standards for biosecurity as part of the WTO framework.¹³ The UK is a member of these bodies,¹⁴ and currently submits information to them via the EU.

8 *Ibid.*

9 *Ibid.*

10 [Q 26](#)

11 Written evidence from the National Farmers’ Union ([PAB0031](#))

12 Written evidence from the RSPB ([PAB0024](#))

13 For example [Q 5](#) (Dr Robert Black); [Q 26](#) (Dr Christine Middlemiss); written evidence from the Ornamental Aquatic Trade Association ([PAB0002](#)); written evidence from the National Farmers’ Union ([PAB0031](#)).

14 Both individually and, where relevant, as an EU Member State. The UK will continue to be an individual member post-Brexit.

11. Within these EU and international frameworks the UK also has a limited ability to take its own biosecurity measures, where such action does not impede the EU's competence to act. Relevant EU legislation usually includes provisions allowing the individual Member States to take emergency measures to deal with biosecurity threats.¹⁵ Lord Gardiner of Kimble, Parliamentary Under Secretary of State for Rural Affairs and Biosecurity at Defra, gave the example of *Epitrix* (a flea beetle that can pose a significant threat to potato crops):

“We decided on the basis of scientific evidence and a risk-management assessment, and with an element of precaution, that we should take national measures. We and Ireland were the only countries in the EU to take that but we took the view ... that we should act.”¹⁶

12. **While operating under a global framework, and with some opportunities for national measures, much of the UK's biosecurity currently depends upon cooperation with the EU.**

About this inquiry

13. Given the critical importance of effective biosecurity measures to our food supply, environment and economy, and given that most of the UK's current biosecurity measures derive from its EU membership, the EU Energy and Environment Sub-Committee decided to consider what impact Brexit might have on the UK's plant and animal biosecurity.
14. The Committee, whose members are listed in Appendix 1, met to take evidence in April and May 2018. We are grateful to those who gave oral evidence and those who responded to our request for written contributions, all of whom are listed in Appendix 2.
15. **We make this report to the House for debate.**

15 See, for example: Article 10 of Directive 90/425/EEC concerning veterinary and zootechnical checks applicable in intra-Community trade in certain live animals and products with a view to the completion of the internal market; or, Article 16 of Directive 2000/29/EC on protective measures against the introduction into the Community of organisms harmful to plants or plant products and against their spread within the Community.

16 [Q 42](#)

CHAPTER 2: LEGISLATION

16. Much of the UK's biosecurity legislation comes from the EU, with Regulations covering plant health, animal health, food safety and invasive non-native species. It is therefore essential to ensure the UK has the necessary legislative framework to maintain its biosecurity post-Brexit. Establishing the powers under which this will be done is a key aim of the European Union (Withdrawal) Act 2018.¹⁷
17. The Minister, Lord Gardiner, told the Committee:
- “The purpose of the Withdrawal Bill is to bring forward all the work that has taken place on biosecurity in a European context to be on our domestic statute book so that there is certainty for this country, for businesses and the way we conduct ourselves ... The only elements on this that we will need to look at are where there are technical changes to make it compliant. If there is a reference to an EU institution, for example, we need to make it domestic. Other than that, the whole architecture of biosecurity within the European context will come over.”¹⁸
18. Some of the organisations that the Committee heard from were content with this approach. The National Farmers' Union (NFU), for example, told us: “If executed successfully, the transfer of law via the ... [Withdrawal Bill] should be sufficient to ensure that current legislative protections remain in place.”¹⁹
19. Others, however, expressed concerns as to how this would work in practice, in particular with regard to the UK's membership of the various agencies that enforce and monitor European legislation. Dr Rob Amos and Dr Emily Lydgate from the University of Sussex, for example, stated:
- “With respect to food safety, animal and plant health and animal welfare, the transfer of law will not automatically provide for the same level of legislative protection. Depending on the nature of our future relationship with the EU, it will likely additionally require the UK to replicate some of the risk assessment, auditing and information-sharing functions that currently take place at EU level.”²⁰
- Food law**
20. Lesley Griffiths AM, Cabinet Secretary for Energy, Planning and Rural Affairs and Minister for the Environment in the Welsh Government, told us:
- “Our food law largely consists of directly applicable EU legislation. The European Union (Withdrawal) Bill will bring existing EU food law into the law of the UK. This will deal with the law, but not the ability to implement it. At present we rely on the European Food Safety Authority (EFSA) for risk assessment and the European Commission and Council for risk management. We need a legal basis to deliver these functions.”²¹

17 The European Union (Withdrawal) Act 2018 had yet to be enacted at the time of our inquiry, and is generally referred to as the “Withdrawal Bill” in the evidence quoted in this report.

18 [Q 42](#)

19 Written evidence from the National Farmers' Union ([PAB0031](#))

20 Written evidence from Dr Rob Amos and Dr Emily Lydgate ([PAB0037](#))

21 Written evidence from the Welsh Government ([PAB0033](#))

21. During a roundtable discussion with food safety experts, convened to look specifically at post-Brexit food safety risk management, we heard that unless legislation was brought forward to give a domestic body the power to make risk management decisions, “all risk management decisions will have to go to a Health Minister for approval”.²² This concerned witnesses. Sue Davies, Strategic Policy Partner at Which?, told us: “We need to make sure that we do not lose sight of the fundamental principles that have guided not just the UK’s approach to food safety, but the EU’s approach to it”, which included having “an independent, arm’s-length body”.²³ Heather Hancock, Chair of the Food Standards Agency, reminded the Committee that the Agency was created “to rebuild public trust in the system [after the BSE outbreak] by removing Ministers from food safety risk management decisions”.²⁴
22. The Government has subsequently restated that it intends food safety risk management decisions to be made by Ministers in the Department of Health.²⁵
23. **While the Government has stated that all EU biosecurity legislation will be transposed into domestic law using powers under the European Union (Withdrawal) Act 2018, the loss of the role of EU institutions enshrined in the legislation will create gaps that need to be filled. UK bodies will need to be given the necessary powers to carry out important biosecurity functions currently undertaken at EU level. We ask the Government to confirm whether the powers conferred on Ministers by Section 8 of the EU (Withdrawal) Act to address “deficiencies dealing with withdrawal” will be sufficient to enable Ministers to set up new agencies, or whether further primary legislation is needed.**
24. **One biosecurity function that will need to be repatriated is food safety risk management. We call on the Government to provide clarity to the industry and the wider public on how this will be conducted when the UK leaves the EU, and when, if necessary, any legislation will be brought forward. It is important that the principle of keeping food safety decisions at arm’s length from those Ministers who are responsible for dealing with the interests of food producers is maintained.**

22 Oral evidence taken on 4 July 2018 (Session 2017–19), [Q 1](#) (Heather Hancock)

23 Oral evidence taken on 4 July 2018 (Session 2017–19), [Q 1](#)

24 *Ibid.*

25 HL Deb, 5 September 2018, [cols 1694–1695](#)

Invasive non-native species law

Box 1: EU Regulation 1143/2014 on Invasive Alien Species (IAS)

Known as the IAS Regulation, this came into force on 1 January 2015 and sets out a series of measures to be taken in relation to the list of Invasive Alien Species of Union concern (see below). Invasive alien species are what are referred to in the UK as invasive non-native species. According to the European Commission, the Regulation envisages three distinct types of measures:

- **Prevention:** robust measures aimed at preventing IAS of Union concern from entering the EU, either intentionally or unintentionally.
- **Early detection and rapid eradication:** Member States must put in place a surveillance system to detect the presence of IAS of Union concern as early as possible and take rapid eradication measures to prevent them from establishing.
- **Management:** some IAS of Union concern are already well-established in certain Member States and concerted management action is needed so that they do not spread any further and to minimise the harm they cause.

The list of Invasive Alien Species of Union concern is updated regularly and both the Commission and Member States can propose the inclusion of new species. These proposals are then considered by a Scientific Forum, which makes a recommendation to the IAS Committee (made up of representatives from all Member States) for a decision. Species on the list are subject to the restrictions on keeping, importing, selling, breeding and growing set out in the Regulation.

Source: European Commission, 'Invasive Alien Species': http://ec.europa.eu/environment/nature/invasivealien/index_en.htm [accessed 13 August 2018] and European Commission, 'List of Invasive Species of Union concern': http://ec.europa.eu/environment/nature/invasivealien/list/index_en.htm [accessed 13 August 2018]

25. Dr Niall Moore, England's Chief Non-Native Species Officer, told us:

“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.”²⁶

Lord Gardiner confirmed this: “We will be bringing back that armoury on biosecurity via the Withdrawal Bill.”²⁷

26. Dr Rob Amos and Dr Emily Lydgate from the University of Sussex told us: “Assuming that the UK continues to fulfil its other international obligations ... the transfer of EU Regulation 1143/2014 into UK law should be sufficient to ensure that current legislative protections against the introduction and spread of invasive alien species remain.”²⁸

27. Other witnesses, however, were concerned that the Regulation was closely entwined with EU institutions and processes. The RSPB told us: “Although we have discussed this with the relevant officials, the RSPB remains unclear as to precisely how the functions and principles of the IAS Regulation will be converted into domestic law following a UK withdrawal from the EU.”²⁹

26 [Q 29](#)

27 [Q 42](#)

28 Written evidence from Dr Rob Amos and Dr Emily Lydgate ([PAB0037](#))

29 Written evidence from the RSPB ([PAB0024](#))

28. Wildlife and Countryside Link shared this concern, noting that “the process by which species (or other taxonomic entities) are risk-assessed and included or removed from the EU list currently involves academic experts, the European Commission and representatives of all EU Member States”.³⁰ It was unclear to the RSPB whether, once the UK leaves the EU, it would continue to mirror the EU list or devise its own process to keep the list updated. The RSPB were “concerned the UK Government will replace this system with irregular Orders of Council issued by the Secretary of State. Such a system would neither be as rigorous or accountable as the EU system.”³¹

29. In addition, Wildlife and Countryside Link told us:

“The EU IAS Regulation requires an independent academic body (referred to as the Scientific Forum) that provides guidance and scrutiny on the implementation of the IAS Regulation, and which prevents the inclusion of any species on the List of Species of Union Concern where the evidence does not presently support its inclusion.”³²

The legislative protection in the Regulation would not be fully enacted in the UK, they argued, unless the function of the Scientific Forum was repatriated. They suggested: “This function could be carried out by extending the remit of an existing body (a model for this could be the Advisory Committee on Releases to the Environment³³) or fall under the remit of a newly created body, such as the proposed ‘environmental watchdog’ on which the Government is due to consult.”³⁴ Since Wildlife and Countryside Link made their submission to the inquiry, the Government has published its consultation on the development of an Environmental Principles and Governance Bill, which contains no reference to including this specific function.³⁵

30. **We call on the Government to clarify how the list of Invasive Alien Species of Union concern, which is central to the Invasive Alien Species Regulation, will be updated and administered when the UK leaves the EU.**

31. **We further recommend that, where bringing across EU biosecurity law through the EU (Withdrawal) Act requires the UK to replicate functions previously performed by EU institutions, the Government should commit to replicating the same level of rigour, transparency and accountability as exists at present.**

30 Written evidence from Wildlife and Countryside Link ([PAB0025](#))

31 Written evidence from the RSPB ([PAB0024](#))

32 Written evidence from Wildlife and Countryside Link ([PAB0025](#))

33 An independent Advisory Committee of scientists who advise the Government on risks from genetically modified organisms and on the release of some non-native plants and animals. Advisory Committee on Releases to the Environment, ‘About us’: <https://www.gov.uk/government/organisations/advisory-committee-on-releases-to-the-environment/about> [accessed 13 August 2018])

34 Written evidence from Wildlife and Countryside Link ([PAB0025](#))

35 Department for Environment, Food and Rural Affairs, *Environmental Principles and Governance after the United Kingdom leaves the European Union* (May 2018): https://consult.defra.gov.uk/eu/environmental-principles-and-governance/supporting_documents/Environmental%20Principles%20and%20Governance%20after%20EU%20Exit%20%20Consultation%20Document.pdf [accessed 13 August 2018]

Plant health law

Box 2: Regulation (EU) 2016/2031 on protective measures against pests of plants

Known as the Plant Health Law, this Regulation came into force on 13 December 2016 and is due to be fully implemented by Member States by 13 December 2019. It focuses on preventing destructive plant pests from entering the EU, or preventing their spread if they are found to be present. Those that pose the greatest risk to the economy, environment or society, known as ‘priority pests’, “will be subject to enhanced measures concerning surveys, action plans for their eradication, contingency plans and simulation exercises”;³⁶ others are subject to varying levels of restrictions or eradication depending on the risk they pose and their current prevalence. Conditions on the import into the EU of plants and plant products range from prohibition (for those posing the highest risk), to requiring the plant material be accompanied by a phytosanitary certificate to confirm compliance with EU legislation. All plants moving within the EU require a plant passport to certify their health status and enable traceability.

Source: European Commission, New Plant Health Regulation: stringent rules for a better protection from plant pests (13 December 2016): [http://europa.eu/rapid/press-release MEMO-16-4310_en.htm](http://europa.eu/rapid/press-release_MEMO-16-4310_en.htm) [accessed 13 August 2018]

32. The EU’s latest Plant Health Law is described in Box 2. Chief Plant Health Officer Professor Nicola Spence explained the extent of UK influence on its development: “For the last three years we have been working with other Member 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.”³⁷
33. The Regulation is applicable from 14 December 2019. As the UK will leave the EU in March 2019, this raises some uncertainty as to how the Regulation will be implemented in the UK. Lord Gardiner stated: “I cannot tell [you] ... precisely how we would implement because it would depend on whether we have the implementation period.”³⁸ He was keen to stress, however, that: “we will be looking to have this work on our statute book”.³⁹

36 European Commission, *New Plant Health Regulation: stringent rules for better protection from plant pests* (13 December 2016): [http://europa.eu/rapid/press-release MEMO-16-4310_en.htm](http://europa.eu/rapid/press-release_MEMO-16-4310_en.htm) [accessed 13 August 2018]

37 [Q 29](#)

38 [Q 42](#)

39 *Ibid.*

Animal health law

Box 3: Regulation (EU) 2016/429 on transmissible animal diseases

This Regulation, known as the Animal Health Law, entered into force in April 2016 but will not be fully applied until April 2021. It consists of “requirements for disease prevention and preparedness; disease awareness; biosecurity; traceability of animals and where necessary products thereof; intra-EU movements and entry into the EU of animals and animal products; surveillance; disease control and eradication; and emergency measures”.⁴⁰ It streamlines various existing acts into a single law, as well as introducing some new measures.

Source: European Commission, *General Q&A: New EU Regulation on transmissible animal diseases*, March 2016: https://ec.europa.eu/food/sites/food/files/animals/docs/ah_law_regulation-proposal_qanda.pdf [accessed 13 August 2018]

34. A number of witnesses spoke positively about the new EU Animal Health Law (see Box 3). The British Veterinary Association, for example, said it was “generally recognised as well thought out, practical and flexible”,⁴¹ and the National Farmers’ Union (NFU) stated that the disease list included in the Regulation was “vital for the biosecurity of EU livestock”.⁴²
35. As the City of London Corporation noted, however, the Regulation is “subject to a staggered implementation”,⁴³ with “the majority of the complementary Commission delegated and implementing acts to be adopted by 21 April 2019”, and full implementation from 21 April 2021.⁴⁴ With the UK leaving the EU in March 2019, it is unclear if or how the Regulation would be implemented in the UK. The Agriculture and Horticulture Development Board (AHDB) told us: “It would be of concern if the ongoing process of implementation of the Animal Health Law were to be complicated by the process of leaving the EU.”⁴⁵
36. **We welcome the commitment made by the Minister that the new EU Plant Health Law will be implemented in the UK, and call for similar clarity in respect of the EU Animal Health Law.**

Enforcement

37. Witnesses to our 2017 *Brexit: environment and climate change* inquiry⁴⁶ told us about the gap in enforcement and oversight mechanisms that will be created when the UK leaves the EU, and this concern was echoed by witnesses to this inquiry.
38. The task of ensuring that the biosecurity standards set out in legislation are being met falls to EU agencies. The AHDB explained, for example, that “the EU’s Food and Veterinary Office undertakes regular missions to member states to check practices and compliance in relation to animal health, animal

40 European Commission, *General Q&A: New EU Regulation on transmissible animal diseases*, March 2016, p 2: https://ec.europa.eu/food/sites/food/files/animals/docs/ah_law_regulation-proposal_qanda.pdf [accessed 13 August 2018]

41 Written evidence from the British Veterinary Association ([PAB0013](#))

42 Written evidence from the National Farmers’ Union ([PAB0031](#))

43 Written evidence from the City of London Corporation ([PAB0021](#))

44 *Ibid.*

45 Written evidence from the Agriculture and Horticulture Development Board ([PAB0017](#))

46 European Union Committee, *Brexit: environment and climate change* (12th Report, Session 2016–17, HL Paper 109)

welfare and food safety. This acts as a valuable independent assessment of risk management.”⁴⁷ The AHDB questioned who would perform that function when the UK left the EU, as did Welsh Government Minister Lesley Griffiths AM: “There will ... need to be a body to replicate the audit and advisory support, post EU exit, currently delivered through the FVO [Food and Veterinary Office].”⁴⁸

39. The RSPB also raised the issue of enforcement:

“The text of The IAS Regulation requires Member States to report to The European Commission on a 6-yearly basis on actions taken to implement the IAS Regulation ... The European Commission also has a responsibility to ensure Member States are implementing the IAS Regulation and can take enforcement action when necessary, along with the European Court of Justice.”⁴⁹

40. When we asked Lord Gardiner how enforcement would be dealt with post-Brexit, he told us: “If we need to look at either remits or additional powers to retain our reputation and our requirements, we will look at that ... We will take every opportunity, if necessary, to bolster any existing organisations.”⁵⁰

41. **As in other policy areas, the EU’s biosecurity legislation includes a range of reporting requirements and checks to ensure Member States are complying with the law. The Commission also has the power to take legal action against countries that are failing to comply, including referral to the Court of Justice of the European Union, which can impose financial penalties.**

42. **As we concluded in our *Brexit: environment and climate change* report, as well as bringing EU biosecurity legislation into UK law, the Government must establish independent and effective domestic enforcement mechanisms to take on the role currently filled by the Commission.**

47 Written evidence from the Agriculture and Horticulture Development Board ([PAB0017](#))

48 Written evidence from Welsh Government ([PAB0033](#))

49 Written evidence from the RSPB ([PAB0024](#))

50 [Q 44](#)

CHAPTER 3: UK-EU COOPERATION

43. Not only does much of the UK’s biosecurity legislation derive from the EU, but many of the systems used to maintain biosecurity are shared EU systems. Biosecurity professionals across the EU benefit from formal and informal opportunities to work together. When the UK leaves the EU, it will not have the same access to these systems and networks.

Why cooperation is important

44. Many of the organisations who gave evidence to this inquiry stressed the importance of continued biosecurity cooperation with the EU. Wildlife and Countryside Link told us that “regardless of the nature of the UK’s future relationship with the EU, cooperation on biosecurity matters must continue to the greatest possible extent”,⁵¹ a view shared by Fera Science Ltd, Anglian Water Services and the British Veterinary Association.⁵²
45. The Department for Environment, Food and Rural Affairs (Defra) agreed: “The aim of the UK Government is the broadest and deepest possible partnership with the EU ... Collaboration in this area strengthens the biosecurity of both the UK and the EU.”⁵³
46. The key reason cited for continuing biosecurity cooperation was, as the Minister said, “because disease and pests have no respect for borders”⁵⁴—our geographical proximity to the EU means many biosecurity risks are shared. The Royal Botanic Garden Edinburgh told us that northward migration due to climate change, compounded by substantial movement of animals due to human activity, means the EU “remains a likely source of future pests and pathogens”.⁵⁵
47. Continued trade with the EU underlines the case for biosecurity cooperation. Dr Rob Amos and Dr Emily Lydgate from the University of Sussex stated: “Given that the UK intends to retain strong trading links, and that commercial trade is one of the identified common pathways through which invasive alien species spread, a shared approach between the UK and EU to biosecurity is essential post-Brexit.”⁵⁶
48. Fera summarised the position as follows:
- “Plant pests and pathogens are no respecters of borders. Recent evidence has strongly suggested that ash dieback did reach the UK naturally (i.e. as windborne spores), as well as via the trade in young trees. Whatever the political settlement, the UK cannot escape its geography and its proximity to continental Europe, with the natural airborne spread of pests and disease posing a very real threat. Even without this, ongoing travel and trade with Europe will provide major pathways for transmission post-Brexit and even with effective (or indeed improved) border controls, biosecurity is not guaranteed. Hence it is vital we retain strong links with our European neighbours

51 Written evidence from Wildlife and Countryside Link ([PAB0025](#))

52 Written evidence from Fera Science Ltd ([PAB0009](#)), Anglian Water Services Ltd ([PAB0006](#)) and the British Veterinary Association ([PAB0013](#))

53 Written evidence from the Department for Environment, Food and Rural Affairs ([PAB0018](#))

54 [Q 43](#)

55 Written evidence from the Royal Botanic Garden Edinburgh ([PAB0038](#))

56 Written evidence from Dr Rob Amos and Dr Emily Lydgate ([PAB0037](#))

and where possible a joined-up, regional approach to preventing the spread of non-indigenous pests and pathogens.”⁵⁷

49. **Given geographical proximity and the volume of trade and travel between the UK and the EU, continued cooperation is critical to the UK’s future biosecurity.**

Shared intelligence

50. Many organisations emphasised the biosecurity benefit of the formal and informal information sharing that takes place between EU Member States, and expressed concern that this would be weakened or lost when the UK leaves the EU.
51. The NFU told us: “Surveillance information is integral to informing the plans to prevent, eliminate and eradicate disease—an array of surveillance information is shared formally and informally via the EU, and the UK could miss out on this vital resource.”⁵⁸ The Scottish Government and the Equine Disease Coalition and British Equine Veterinary Association agreed.⁵⁹
52. The value of shared intelligence was also recognised in Defra’s evidence: “The Government considers it mutually beneficial for the UK and the EU to continue to work jointly or share information, including surveillance and evidence around biosecurity.”⁶⁰

Disease notification systems

53. The UK currently benefits from EU-wide alerts on diseases and pests that may pose biosecurity risks, through access to the Animal Disease Notification System (ADNS), the Rapid Alert System for Food and Feed (RASFF), the European Alien Species Notification System (EASIN NOTSYS) and the European Union Notification System for Plant Health Interceptions (EUROPHYT). These are outlined in Box 4.

Box 4: ADNS, RASFF, EASIN NOTSYS and EUROPHYT

ADNS

The EU’s Animal Disease Notification System (ADNS) registers and documents the development of infectious animal diseases. Member States are responsible for supplying ADNS with information on outbreaks; a notification is issued to all countries that participate in the system within 24 hours when a new outbreak occurs, and a summary that includes details of how outbreaks are developing is sent weekly. As well as Member States, EU candidate (and potential candidate) countries, countries in the European Free Trade Association (EFTA) and countries with particular agreements with the EU (such as Andorra and the Faroe Islands) participate in ADNS.

57 Written evidence from Fera Science Ltd ([PAB0009](#))

58 Written evidence from the National Farmers’ Union ([PAB0031](#))

59 Written evidence from the Scottish Government ([PAB0039](#)) and the Equine Disease Coalition and British Equine Veterinary Association ([PAB0015](#))

60 Written evidence from the Department for Environment, Food and Rural Affairs ([PAB0018](#))

RASFF

The Rapid Alert System for Food and Feed (RASFF) enables the swift exchange of information on health risks to food and feed. Once a member country notifies the Commission of a risk (posed either by a product on the market or by a consignment tested at an EU border), that information is transmitted to all other RASFF members. Members then report back on investigations or other actions they undertake as a result of the alert. All EU Member States and three of the four EFTA countries are members;⁶¹ Switzerland is a partial member, receiving notifications on border rejections. RASFF also has an online database that allows members of the public to access summary information on notifications.

EASIN NOTSYS

The European Alien Species Notification System (EASIN NOTSYS) is the tool used by Member States to notify the Commission and other Members of new detections of species on the list of Union concern, and the related eradication measures taken.

EUROPHYT

The European Union Notification System for Plant Health Interceptions (EUROPHYT) is the notification and rapid alert system for interceptions (for plant health reasons) of consignments being imported into the EU or traded between Member States. Members (EU Member States and Switzerland) enter data about non-compliant consignments into the database, which then immediately notifies all other members. These are stored in a database that all members can access. The European and Mediterranean Plant Protection Organisation (EPPO) does not have full access to the database but receives regular information on notifications; monthly overviews are available to the general public.

Source: European Commission, 'Animal Disease Notification System (ADNS)': https://ec.europa.eu/food/animals/animal-diseases/not-system_en [accessed 13 August 2018]; European Commission, Questions and Answers: Rapid Alert System for Food and Feed (August 2017): http://europa.eu/rapid/press-release_MEMO-17-2461_en.htm [accessed 13 August 2018]; European Commission, 'EASIN Notification System (NOTSYS)': <https://easin.jrc.ec.europa.eu/notsys> [accessed 13 August 2018]; European Commission, 'European Union Notification System for Plant Health Interceptions: EUROPHYT': https://ec.europa.eu/food/plant/plant_health_biosecurity/europhyt_en [accessed 13 August 2018]

54. Witnesses were keen to remain part of these systems. For example, the Agriculture and Horticulture Development Board (AHDB) and the Moredun Research Institute both thought the UK would benefit from remaining in RASFF.⁶² Dr Simon Doherty, Junior Vice-President of the British Veterinary Association (BVA), told us the BVA hoped “we could look at negotiating a position similar to Norway, Switzerland and Turkey, who have access to that Animal Disease Notification System without being members of the EU”.⁶³ And in relation to EASIN NOTSYS the RSPB said:

“If the UK does not retain access to this system, and a similar system is not put in its place, following a UK withdrawal from the EU; then the UK will be reliant on informal communication between government

61 Iceland, Liechtenstein, and Norway

62 Written evidence from the Agriculture and Horticulture Development Board (PAB0017) and Moredun Research Institute (PAB0036)

63 Q 17

officials. A process which is likely to be neither rigorous nor timely, and wholly dependent on the personal relationships of individual officials.”⁶⁴

55. Simon Hall, Director for EU Exit and Trade at the Animal and Plant Health Agency, told us that these systems “are available to countries outside the EU so there is every reason to believe that we would continue to be able to participate”.⁶⁵ In terms of negotiating that access, however, he told us: “To my knowledge, the negotiations in Brussels have reached nowhere near that level of detail yet.”⁶⁶ The Minister added a note of caution, noting that these systems were “EU-owned and we will no longer be a member of the EU”. He continued: “We will also make sure that we have developed fallback positions on immediate loss of access.”⁶⁷
56. Defra told us that these databases had “significant publicly available elements” that they intended to continue to access if the UK were no longer part of the EU’s notification systems.⁶⁸ Chief Veterinary Officer Dr Christine Middlemiss and Chief Plant Health Officer Professor Nicola Spence warned, however, that this might mean the UK would not receive notifications “as quickly as we currently do as a Member State”.⁶⁹
57. **As an EU Member State, the UK currently receives pest and disease notifications that assist in maintaining the UK’s biosecurity. While EU notifications are often made publicly available, relying on this after we leave the EU would mean the UK receiving notifications more slowly than it currently does as a Member State.**
58. **We urge the Government therefore to seek continued participation in EU disease notification systems. Detailed provision also needs to be made for how the UK could maintain its biosecurity without full access to these systems. With only months to go before the UK leaves the EU, it is concerning that these provisions are not already in place.**

International notification systems

59. A number of non-EU organisations play a part in biosecurity information sharing and disease notification. The Woodland Trust stated: “The UK can remain a member of plant protection organisations post-Brexit, most notably the European and Mediterranean Plant Protection Organization (EPPO). This will ensure that the UK will remain up to date on potential biosecurity threats.”⁷⁰ The British Veterinary Association (BVA) told us:

“The UK will continue to have access to the OIE [World Organisation for Animal Health] international surveillance system and alerts through the World Animal Health Information System, better known as WAHIS, an internet-based computer system that processes data on animal diseases in real-time and then informs the international community.”⁷¹

64 Written evidence from the RSPB ([PAB0024](#))

65 [Q 43](#)

66 *Ibid.*

67 *Ibid.*

68 Written evidence from the Department for Environment, Food and Rural Affairs ([PAB0018](#))

69 [Q 31](#)

70 Written evidence from the Woodland Trust ([PAB0030](#))

71 Written evidence from the British Veterinary Association ([PAB0013](#))

Fera suggested the UK should engage with the International Plant Sentinel Network, which “provides international connectivity and cooperation, as well as a mechanism for early warning and horizon scanning of future risks”.⁷²

60. The Government also emphasised the UK’s ability to draw on non-EU mechanisms, explaining that information on animal health was already taken from “a variety of sources including the World Organisation for Animal Health (OIE), the Food and Agriculture Organisation of the United Nations (FAO) and the International Society for Infectious Diseases (ProMed)”.⁷³ It described the EPPO as a “strong and effective intergovernmental non-EU organisation ... [that] has always played an essential role in risk assessment, intelligence gathering/sharing and setting standards”.⁷⁴
61. The Scottish Government, on the other hand, warned that “OIE systems are in no way equivalent to those available to EU Member States”.⁷⁵ Dr Simon Doherty of the BVA suggested the data in the OIE’s/ WAHIS system might not give the full picture: “You can imagine a situation where countries may be less willing to report something if there were going to be restrictions on their trade.”⁷⁶
62. **If the UK is unable to maintain access to the EU’s disease notification systems, it will be able to draw on international sources of information. It is not clear, however, whether these would enable the UK to maintain its current level of biosecurity.**

TRACES

Box 5: Trade Control and Expert System (TRACES)

All animals, plants, food, feed, semen and embryo traded within, or imported into, the EU have to be accompanied by documentation. TRACES is an online tool that manages this process. The required documentation is posted on TRACES in advance, pre-notifying countries that the consignment is due to arrive and allowing them to plan their controls in advance. Border control staff then check the consignments and certification. As well as speeding up the process, it allows all consignments to be traced. This makes it easier to respond to any disease outbreaks or other health threats.

Source: European Commission, ‘TRAdE Control and Expert System’: https://ec.europa.eu/food/animals/traces_en [accessed 14 August 2018]; European Commission, ‘How does TRACES work’: https://ec.europa.eu/food/animals/traces/how-does-traces-work_en [accessed 14 August 2018]

63. Trade is an important factor in the movement of biosecurity risks, and witnesses highlighted the importance of TRACES in documenting such movements within the EU. The Dogs Trust told us that it “is invaluable when animals have to be traced as a result of disease outbreak”.⁷⁷ The City of London Corporation stated: “The UK should seek to maintain access to this system. An equivalent system would be costly, and it is uncertain whether it would provide consistency with the EU due to a lower level of intelligence, with TRACES rejections not communicated to UK authorities.”⁷⁸

72 Written evidence from Fera (PAB0009)

73 Written evidence from the Department for Environment, Food and Rural Affairs (PAB0018)

74 *Ibid.*

75 Written evidence from Scottish Government (PAB0039)

76 Q 17

77 Written evidence from the Dogs Trust (PAB0016)

78 Written evidence from The City of London Corporation (PAB0021)

64. There was uncertainty over whether continuing UK access after Brexit would be possible. The Dogs Trust told us that “the European Commission has made clear that access to TRACES is only permissible if a country is a member of the single market”,⁷⁹ and the NFU agreed: “It can only be used by Member States to track livestock and only covers EU countries.”⁸⁰ The Ornamental Aquatic Trade Association, however, believed that non-EU states such as Singapore had access to these system, “so there is reason to believe the same could apply to the UK”.⁸¹
65. Simon Hall, of the Animal and Plant Health Agency, told us: “Development of that new British-owned and operated import control system to replace some of the functions of the EU TRACES system is going ahead because it will be needed and of benefit regardless of the precise sequence of events.”⁸² The Minister confirmed that work on a replacement system had started, and that £5.2 million had already been spent.⁸³
66. **The ability to trace the movements of animals and plants (and plant and animal products) is an important component of biosecurity.**
67. **We note that work has already begun to create a UK replacement for the EU’s TRACES system. Given the crucial role the system plays in minimising the biosecurity risks of trade and managing a disease outbreak when it occurs, it is crucial that the replacement system is ready by the time the UK leaves the EU in March 2019.**
68. **Given that a stand-alone UK system would not benefit from the EU-wide intelligence contained in TRACES, the Government should also explore the potential to link a UK system to TRACES.**

The Working Party of Chief Veterinary Officers

69. The Agriculture and Horticulture Development Board highlighted the role of the Working Party of Chief Veterinary Officers:

“The involvement of the UK Chief Veterinary Officer in the [EU] Working Party of Chief Veterinary Officers is very important ... If not present at this meeting there will only be access to official reports from the group which will lack the nuances in the discussion and the informal briefings in the margins. The effects of not being involved directly should not be underestimated.”⁸⁴

The National Pig Association and the Dogs Trust were also keen that the UK continue to be part of the Working Party post-Brexit.⁸⁵

70. Defra’s Chief Veterinary Officer, Dr Christine Middlemiss, told us: “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.”⁸⁶

79 Written evidence from the Dogs Trust ([PAB0016](#))

80 Written evidence from the National Farmers’ Union ([PAB0031](#))

81 Written evidence from the Ornamental Aquatic Trade Association ([PAB0002](#))

82 [Q 45](#)

83 *Ibid.*

84 Written evidence from Agriculture and Horticulture Development Board ([PAB0017](#))

85 Written evidence from the National Pig Association ([PAB0032](#)) and the Dogs Trust ([PAB0016](#))

86 [Q 34](#)

71. **We call on the Government to seek continued involvement in the Working Party of Chief Veterinary Officers (and the Working Party of Chief Plant Health Officers), so that both formal and informal biosecurity information sharing can continue.**

Risk assessment and risk management

72. In the words of the Chair of the Food Standards Agency (FSA), Heather Hancock, risk assessment is “the science that identifies and assesses the nature [of the risk]”, while risk management “takes that scientific assessment, factors in other relevant issues, such as consumer interests, and identifies the potential prevention and control measures that could be used to manage the risk”.⁸⁷ Both functions are currently undertaken at EU level:

“The process starts with the European Food Safety Authority, EFSA, undertaking and publishing a scientific risk assessment. Officials in the European Commission take that risk assessment and propose draft legislation to implement an appropriate risk management decision. That proposal is then discussed at the Standing Committee on Plants, Animals, Food and Feed.”⁸⁸

Most decisions are agreed by the Standing Committee, with the European Council and Parliament being consulted “only on the most sensitive issues”.⁸⁹

73. Defra told us the UK “will still have access to the EFSA assessments through their public access website”,⁹⁰ though Dr Middlemiss said that this would lead to “a delay”.⁹¹ The British Veterinary Association (BVA) were also concerned that the UK would lose “early notification on assessments”.⁹² Chief Plant Health Officer Professor Nicola Spence suggested this delay might be mitigated, at least in relation to plant health, by the UK’s membership of EPPO: “I would expect anything significant would be shared quickly with EPPO.”⁹³
74. In addition to the potential for delay, some witnesses suggested EFSA risk assessments would become less useful to the UK post-Brexit. The BVA noted that “EFSA reports may not include UK data”,⁹⁴ and Professor Guy Poppy, of the FSA, suggested the UK might not be able to access “the underpinning data that it [EFSA] has used”, making EFSA less useful in informing UK risk management decisions.⁹⁵
75. Dr Emily Lydgate, lecturer in environmental law at the University of Sussex, told us: “We could elect to have third country status in EFSA and continue to participate ... but that would require—the relevant legislation spells this out—that we have adopted and applied relevant legislation in this field. We would need to adopt the EU *acquis* in this area.”⁹⁶

87 Oral evidence taken on 4 July 2018 (Session 2017–19), [Q 1](#)

88 *Ibid.*

89 *Ibid.*

90 Written evidence from the Department for Environment, Food and Rural Affairs ([PAB0018](#))

91 [Q 31](#)

92 Written evidence from the British Veterinary Association ([PAB0013](#))

93 [Q 33](#)

94 Written evidence from the British Veterinary Association ([PAB0013](#))

95 [Q 33](#)

96 [Q 8](#)

76. Most witnesses assumed the UK would not retain membership of EFSA and shared the British Ecological Society’s view that “biosecurity risk assessments will need to be conducted by the UK post-Brexit”.⁹⁷ Professor Poppy told us that the FSA already had “statutory powers related to risk assessment”,⁹⁸ and Defra explained that “we already carry out our own risk assessments” for issues specific to the UK.⁹⁹
77. The British Ecological Society, the National Pig Association and the British Veterinary Association were among the organisations to flag the importance of additional resource to enable the UK to meet the increased need for risk assessments.¹⁰⁰ Professor Poppy told us that the FSA was “receiving significant amounts of money in terms of staff increase ... to be able to undertake risk assessments within the UK”,¹⁰¹ but added that it was having problems recruiting enough chemical toxicologists. Defra told us: “Analysis is ongoing to assess if there are any resource challenges associated with this.”¹⁰²
78. In relation to risk management, as we noted in Chapter 2, the UK Government will also need to grant the appropriate legal powers to whichever body or bodies it wishes to undertake this function. Heather Hancock of the FSA told us that her organisation has “proposed that the FSA should have the power to make risk management decisions”,¹⁰³ supported by a new advisory committee. She said Ministers supported this suggestion: “The only area now for discussion is that we are not yet clear how we would get the power to do that.”¹⁰⁴
79. **Assessing the risks posed by various biosecurity threats, and then deciding on an appropriate response, are functions currently undertaken predominantly at EU level. Post-Brexit, the UK will no longer be able to rely on the EU’s risk assessment and risk management expertise. We urge the Government to ensure that the relevant UK bodies are adequately resourced, and have the necessary legal powers, to undertake these functions from March 2019.**

Research collaboration

80. The Microbiology Society told us:
- “UK-EU collaboration on microbiological research is important for preparing for and responding to threats for animal, plant and foodborne pathogens ... Microbiologists in the UK benefit from and contribute expertise to: EU research funding programmes and networks ... and EU advisory and regulatory bodies.”¹⁰⁵
81. The Society for Applied Microbiology agreed that “UK-based scientists and experts play a significant role in informing and influencing the work of EU

97 Written evidence from the British Ecological Society ([PAB0023](#)). See also written evidence from the Scottish Government ([PAB0039](#)), British Veterinary Association ([PAB0013](#)) and Fera Science Ltd ([PAB009](#))

98 [Q 29](#)

99 Written evidence from the Department for Environment, Food and Rural Affairs ([PAB0018](#))

100 Written evidence from the British Ecological Society ([PAB0023](#)), the National Pig Association ([PAB0032](#)) and the British Veterinary Association ([PAB0013](#))

101 [Q 37](#)

102 Written evidence from the Department for Environment, Food and Rural Affairs ([PAB0018](#))

103 Oral evidence taken on 4 July 2018 (Session 2017–19), [Q 1](#)

104 Oral evidence taken on 4 July 2018 (Session 2017–19), [Q 7](#)

105 Written evidence from the Microbiology Society ([PAB0034](#))

agencies”, adding that “UK-based experts made up 13% of the population of EFSA’s Scientific Panels in the period 2009–2018”.¹⁰⁶ The Society suggested “these collaborations ... function as a conduit of soft power”.¹⁰⁷

82. Dr Simon Doherty, of the British Veterinary Association, who was a veterinary research officer at the Agri-Food and Biosciences Institute in Belfast (AFBI) when the Schmallenberg virus appeared in 2012, highlighted the importance of cooperation between research institutes in biosecurity:

“It was a completely new virus of a type which had not been seen in northern Europe before ... We were in a situation at AFBI where, because of research collaborations that we had been involved in through European funding mechanisms, we were able to pick up the phone and drop an email to the Friedrich-Loeffler Institut, and, literally within days, we were able to get the primers and probes to set up a diagnostic test in Belfast to be prepared for—or at least screen samples for—the possibility that that virus had reached UK shores.”¹⁰⁸

83. The Equine Disease Coalition and British Equine Veterinary Association were confident that this cooperation would continue post-Brexit: “Contact between reference laboratories and global links with other laboratories and institutions carrying out disease surveillance will continue.”¹⁰⁹

84. Other organisations, however, had concerns. The Agriculture and Horticulture Development Board, for example, stated:

“It also remains to be seen whether UK involvement in more informal groupings of laboratories and research workers will be affected by leaving the EU. Research organisations outside the EU can and do participate in European projects but often need to find their own source funding ... There is also a risk that by not participating in the efficient network of laboratory expertise available within Europe that the capability in British laboratories and universities will degrade over time.”¹¹⁰

85. The Microbiology Society told us:

“The Government should swiftly clarify and ensure future collaboration with these infrastructures and, where necessary, strengthen national capacity. It is of national biosecurity importance to act to maintain and promote access and reciprocity of internationally available microbial strains, DNA collections and other data, so the UK research community can continue to effectively study these global threats.”¹¹¹

86. The importance of EU research funding was highlighted by an analysis by Fera of 14 EU and European Food Safety Authority plant and bee health projects. It found that “for every £1 Defra invested in top-up funding, it leveraged access to £51 of total funding”.¹¹²

106 Written evidence from the Society for Applied Microbiology ([PAB0012](#))

107 *Ibid.*

108 [Q 17](#)

109 Written evidence from the Equine Disease Coalition and British Equine Veterinary Association ([PAB0015](#))

110 Written evidence from Agriculture and Horticulture Development Board ([PAB0017](#))

111 Written evidence from the Microbiology Society ([PAB0034](#))

112 Written evidence from Fera Science Ltd ([PAB0009](#))

87. The UK Government has proposed “a science and innovation accord” with the EU, which would provide for continuing UK participation in some EU research funding programmes, and establish “channels for regular dialogue between regulators, researchers and experts”.¹¹³ It is not yet known whether the EU will accept this proposal or, if it does, the extent of the funding programmes that would be included.
88. **Collaborative work with researchers from across the EU strengthens the UK’s biosecurity knowledge and expertise and can be an effective channel for informal information sharing.**
89. **We note that the Government’s proposal for the future UK-EU relationship includes continued cooperation on research and participation in EU research funding programmes, and we welcome this inclusion. Given that such an agreement cannot be guaranteed, however, we call on the Government to evaluate the impact on the UK’s biosecurity of any loss of joint EU research funding and to ensure alternative sources of funding are available to mitigate any risks identified.**

EU Reference Laboratories

Box 6: Reference Laboratories

The World Organisation for Animal Health (OIE) has a network of designated Reference Laboratories. Each is responsible for a named disease, on which it then acts as a source of expertise, recommending diagnostic methods and vaccines, providing testing facilities, undertaking research, collecting data and providing training to OIE member countries. OIE Reference Laboratories in the UK include the Pirbright Institute, the Animal and Plant Health Agency and the Centre for Environment, Fisheries and Aquaculture Science.

The EU also has a network of National Reference Laboratories, coordinated by EU Reference Laboratories, which fulfil a similar purpose to OIE Reference Laboratories and are often the same institutions. These aim to ensure expertise is shared and standards are harmonised.

Source: World Organisation for Animal Health, ‘Reference Laboratories’: <http://www.oie.int/scientific-expertise/reference-laboratories/terms-of-reference/> [accessed 14 August 2018]; World Organisation for Animal Health, ‘Reference Experts and Laboratories’: <http://www.oie.int/scientific-expertise/reference-laboratories/list-of-laboratories/> [accessed 14 August 2018]; European Commission, ‘EU Reference Laboratories’: https://ec.europa.eu/food/safety/official_controls/legislation/ref-labs_en [accessed 14 August 2018]

90. EU Reference Laboratories (EURLs), as described in Box 6, are funded by the EU, and provide scientific and technical expertise to support the European Commission’s risk assessment and risk management activities. Dr Christine Middlemiss, the Chief Veterinary Officer, told us that the UK had “seven EU Reference Laboratories designated by the EU as being the standard-setting Reference Laboratories”,¹¹⁴ all of which will move to the EU by the time the UK leaves. Dr Middlemiss acknowledged that some personnel might be lost from these laboratories, but stated that the intention was to increase the number of UK institutions that are designated as reference

113 HM Government, *The future relationship between the United Kingdom and the European Union*, Cm 9593, July 2018, p 78: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/725288/The_future_relationship_between_the_United_Kingdom_and_the_European_Union.pdf [accessed 6 August 2018]

114 [Q 31](#)

laboratories by the World Organisation for Animal Health (OIE), to “make up for that gap”.¹¹⁵

91. Dr Simon Doherty of the British Veterinary Association was confident that that recognised global expertise would mean cooperation with EURLs would continue:

“[EURLs] are still going to rely on the global reference laboratories that we maintain here, and the expertise we have ... We have tremendous expertise in foot and mouth disease, African swine fever and highly pathogenic influenza, without even having those diseases in the country. That is not going to go away.”¹¹⁶

92. This was borne out by evidence from one of the UK’s EURLs, the Pirbright Institute:

“Pirbright is the EU Reference Laboratory for FMD [foot and mouth disease] and bluetongue, but it has already been announced that Pirbright will lose this status on Brexit ... Pirbright will, of course, continue to be the UK National Capability with its diagnostic reference laboratory services, and its status as OIE/FAO World Reference Laboratory for FMD, bluetongue and other viruses does not currently appear to be in jeopardy. Pirbright will continue to maintain and develop its reference laboratory capability by collaborating with the new EU Reference Laboratories for FMD and bluetongue, as well as the global bodies OIE and FAO.”¹¹⁷

93. Dr Doherty was concerned, however, that losing EURL status could result in a loss of funding for those institutions:

“To maintain the national reference laboratory framework and the OIE reference laboratory framework at APHA, Weybridge, Pirbright and so on, we will need to ensure those are properly resourced. We should bear in mind the gap in that funding with EU status being taken away.”¹¹⁸

The Society for Applied Microbiology noted that “activities related to the FAO and OIE are not necessarily supported by additional funding, so in practice EU funding goes toward enabling this internationally relevant work”.¹¹⁹

94. With regard to ongoing UK collaboration with EURLs, the Society for Applied Microbiology told us:

“The EURL networks are open to non-EU countries, whose representatives may attend meetings and participate in group proficiency tests. Strong consideration should be given to this option for future UK-EU reference laboratory collaboration ... The Society for Applied Microbiology recommends that HM Government make a strong commitment to maintain collaboration with the EURL network, and

115 [Q 31](#)

116 [Q 20](#)

117 Written evidence from the Pirbright Institute ([PAB0014](#))

118 [Q 20](#)

119 Written evidence from the Society for Applied Microbiology ([PAB0012](#))

to provide additional support to UK NRLs to compensate for any loss in funding, or equivalent resource, as a result of losing EURL status.”¹²⁰

95. **When the UK leaves the EU, UK laboratories will lose EU Reference Laboratory status. They will also lose the funding associated with that status, so it is paramount that the Government ensures UK laboratories are adequately funded to enable them to provide the necessary level of expertise to maintain the UK’s biosecurity, and to support their continued work with other EU and international Reference Laboratories.**
96. **As Reference Laboratories all have their own disease specialisms, the Government needs to ensure that the international Reference Laboratory network it will be relying on covers the full range of diseases in which the UK has an interest.**

Funding

97. We also heard concerns from the RSPB about access to funding for biosecurity activities. Dr Paul Walton of RSPB Scotland told us that “the EU LIFE funding stream is one of the very few biodiversity funding streams we can access” to fund work to tackle invasive non-native species.¹²¹ The EU LIFE programme is described in Box 7.

Box 7: LIFE Programme

The LIFE programme provides co-funding for environmental, nature conservation and climate action projects that contribute to EU policy objectives. Its budget for 2014–20 is €3.4 billion, and the European Commission has proposed this be increased by almost 60% in the 2021–27 budget. The programme allows for the possible participation of countries and activities outside the EU, where that is necessary to achieve the EU’s goals.

Source: European Commission, ‘Welcome to LIFE’: <http://ec.europa.eu/environment/life/> [accessed 14 August 2018]

98. In their written evidence, the RSPB stated:

“The UK receives c. £31 million per year from LIFE. Among other actions for improving the environment, LIFE funds large-scale ambitious invasive non-native species eradication projects. For example, LIFE provided £460,225 of co-financing towards invasive non-native rat eradication and biosecurity as part of the Isle of Scilly Seabirds Recovery Project ... It is essential that EU funds for invasive non-native species biosecurity and management are replaced domestically following a UK withdrawal from the EU.”¹²²

99. **We note the concerns over the loss of EU funding for environmental, nature conservation and climate action projects, many of which have significant biosecurity components. The Government will need to consider what additional resource is needed to continue the biosecurity activity currently funded by the EU.**

120 Written evidence from the Society for Applied Microbiology (PAB0012)

121 Q 18

122 Written evidence from the RSPB (PAB0024)

CHAPTER 4: TRADE AND INSPECTIONS

Tracing movements

100. Trade is a key means by which the UK is exposed to biosecurity risks. Currently, when products enter the EU they are inspected to ensure they comply with standards set out by the WTO and the EU's own laws (see Chapter 2), which include rules to minimise the risk of importing a pest, disease or pathogen. Once those inspections have taken place, goods can move freely within the EU Single Market. The UK, like all other EU Member States, therefore relies on inspections done by other EU countries, and on the EU-wide systems for monitoring trade, to maintain its biosecurity.
101. Once a product, plant or animal has entered the EU it is generally free to move from one Member State to another without further inspection, as long as it has the necessary paperwork. Dr Kezia Barker, Lecturer in Geography at Birkbeck, University of London, told us that “essentially the EU operates as one domain. There is the veterinary check system and the plant passport scheme with the idea that within those schemes animal and plant products can move relatively freely.”¹²³

Tracing plants

102. The NFU noted that, while plants raised in the EU can move within the EU with a ‘plant passport’, plants moving between the EU and third countries require a phytosanitary certificate (‘phyto’): “Phytos tend to offer a higher level of biosecurity because they are issued by the Plant Protection agency of that country. ... There is also a charge for carrying out the inspection, any associated tests and issuing the certificate.”¹²⁴ Plant passports and phytos are described further in Box 8.

Box 8: Plant passports and phytosanitary certificates

If a plant or plant product can host pests or diseases (as listed in Part A, Annex V of Directive 2000/29/EC), it may require a plant passport. This is an identification label, usually issued by the nursery raising the plant in question, which identifies the grower and origin of the product, and verifies that the plant is eligible to move freely within the EU.

A phytosanitary certificate is used for trade outside the EU, and demonstrates that a product is free from harmful pests and plant diseases. It is issued by a national plant protection organisation (NPPO).

103. Newey Thinking, a UK horticultural business, highlighted the additional costs, falling on businesses as well as Government, if plants traded between the UK and EU were to require phytosanitary certificates post-Brexit: “Government will need to employ many more Plant Health Inspectors ... and each business will require at minimum a full time biosecurity administrator to cope with required paperwork per plant to be exported.”¹²⁵
104. The NFU was concerned about barriers to trade, and hoped “to see the status quo continue—i.e. plant passports continued to be used rather than the

123 Q 5

124 Written evidence from NFU (PAB0031)

125 Written evidence from Newey Thinking (PAB0010)

reintroduction of phytos”.¹²⁶ In contrast, Confor argued that phytosanitary certificates should be required for all imported material, on the grounds that “better regulation of all plant material ... would limit the chance of new exotic pests and disease entering the UK”.¹²⁷

105. **While phytosanitary certificates offer a high degree of biosecurity, they also entail a more rigorous administrative and inspection process than the plant passports currently used for the trade of plants between the UK and EU. Both Government and businesses will need to ensure they have sufficient resource to implement the change in regime at the point the UK leaves the EU.**

Tracing animals

106. The movement of animals within the EU is tracked by the TRACES system. The potential for future UK involvement in TRACES, and the actions required to prepare for the UK’s withdrawal, were explored in Chapter 3.

Import inspections

107. Several witnesses highlighted the need to increase resources at UK points of entry for additional biosecurity inspections, once the UK has left the EU Single Market. The NFU pointed out that when materials are imported with a phytosanitary certificate, it “has to be inspected prior to export and again either at import or soon after at a designated site”.¹²⁸ The BVA told us: “Additional capacity at ports will be necessary. Extra inspections and inspection points will be needed.”¹²⁹ Dr Barker, from Birkbeck, University of London, agreed: “There are resource issues of spaces for lorries at Dover, a need for a potential increase in quarantine and containment facilities and higher admin costs”.¹³⁰
108. Prospect Union questioned “where such checks on a large number of lorries could be undertaken without causing gridlock at ports”,¹³¹ and argued that “the physical capacity at our ports currently does not exist to enable adequate inspection of EU imported material”. According to the City of London Corporation, which is responsible for all port health functions on the Thames, points of entry such as short-sea-crossing ports and smaller airports deal with many EU products, but “often have little or no resource”, while “developing a resource (suitably trained workers, infrastructure and inspection facilities) will be problematic in the short run”.¹³²
109. The resources required at the border post-Brexit are explored in more detail in our report *Brexit: the customs challenge*.¹³³

Minimising the need for inspections

110. The example of Switzerland suggests, however, that it is possible for a non-EU state to limit the burden of inspections, by means of regulatory

126 Written evidence from NFU ([PAB0031](#))

127 Written evidence from Confor ([PAB0011](#))

128 Written evidence from NFU ([PAB0031](#))

129 Written evidence from British Veterinary Association ([PAB0013](#))

130 [Q 9](#)

131 Written evidence from Prospect Union ([PAB0008](#))

132 Written evidence from City of London Corporation ([BFS0005](#)) [*Brexit: food prices and availability inquiry*]

133 European Union Committee. *Brexit: the customs challenge* (20th Report, Session 2017–19, HL Paper 187)

cooperation. Dr Rob Amos and Dr Emily Lydgate from the University of Sussex pointed out that “Switzerland has managed to effectively eliminate routine EU border inspections for live animals and animal products, undertaking extensive regulatory cooperation and coordination with the EU in this area”.¹³⁴ Similarly, the British Egg Industry Council argued that “it is critically important that we achieve mutual recognition of our disease controls to avoid unnecessary disruption in trade between the EU and UK and vice-versa due to animal health issues”.¹³⁵

111. Giving evidence on our earlier *Brexit: food prices and availability* inquiry, George Eustice MP, Minister of State for Agriculture, Fisheries and Food at Defra, argued that even in a ‘no deal’ scenario, “It would be open to the UK to unilaterally adopt a risk-based approach to its border inspection and to say that we are confident that the European Union is doing certain things properly.”¹³⁶ He continued:

“In the early days ... with border inspection initially you would say, ‘Membership of the EU plus one? The risks are no different than membership of the EU minus one’, so for an initial period we will adopt a risk-based approach. If months or several years down the line we decide that there are particular challenges with particular animal diseases, or more likely plant diseases, then we could put in place the necessary regulations to impose additional restrictions and have the checks to ensure they could be implemented as well.”

112. In our report *Brexit: the customs challenge*, we concluded: “The Government’s position that, in the case of ‘no deal’, customs checks of goods arriving from the EU could be unilaterally suspended, may be in breach of WTO rules.”¹³⁷
113. **The UK will have to carry out more inspections of products at its borders post-Brexit to ensure it is not exposed to higher biosecurity risks.**
114. **Doubt has been cast on whether there is sufficient infrastructure to carry out biosecurity inspections on goods arriving from the EU. We call on the Government urgently to clarify its plans for ensuring the necessary facilities will be available to maintain the passage of goods across the UK’s borders.**
115. **The need for these inspections could, however, be reduced if the Government were to place minimal checks on imports from the EU. We note, however, that the UK Government would at the very least be obliged to comply with WTO rules. In our *Brexit: food prices and availability* report we urged the Government to publish exactly what customs and border requirements it would put in place on EU food imports in that situation. We repeat that recommendation.**
116. **A decision to place minimal checks on imports from the EU would need to be accompanied by a mechanism for monitoring the risks of such an approach as UK and EU rules diverge over time.**

134 Written evidence from Dr Rob Amos and Dr Emily Lydgate ([PAB0037](#))

135 Written evidence from British Egg Industry Council ([PAB0040](#))

136 Oral evidence taken on 28 February (Session 2017–19), [Q 14](#)

137 European Union Committee. *Brexit: the customs challenge* (20th Report, Session 2017–19, HL Paper 187)

New risks

117. Underlying many of the issues we have explored is the need to balance biosecurity risks against economic opportunities. For instance, Dr Emily Lydgate, Lecturer in Environmental Law at the University of Sussex, said that the challenge facing the Government was one of “striking the balance between on the one hand preventing the introduction of a species or organisms which could be economically and ecologically catastrophic, while on the other hand trying to facilitate trade and reduce bureaucracy in border areas”.¹³⁸
118. The NFU sought a biosecurity framework that would “facilitate trade and also ... do all possible to prevent the introduction of quarantine pests”.¹³⁹ Lord Gardiner agreed: “We are a trading nation and therefore need to continue in that balance—trading with EU countries and non-EU countries, mindful of protocols of biosecurity and having science-based and risk management principles at the very heart of it.”¹⁴⁰
119. Maintaining such a balance in the long term will be a challenge. Dr Barker commented that “every new trading pathway brings with it new risks which would need to be assessed”.¹⁴¹ The Royal Botanic Garden Edinburgh concurred, citing “potentially increased risk if changes in trade agreements result in increased imports from countries further afield, with more/different pests to the existing situation”, and adding that “the risks come from the imports themselves and packaging/shipping.”¹⁴²
120. Dr Paul Walton, of RSPB Scotland, stated: “We need to be responsive to those pathways and be prepared to put in safeguards around them as appropriate.”¹⁴³ According to the British Ecological Society:
- “Should the UK increase trade and transport links with non-EU countries post-Brexit, it will be important to have shared data and surveillance systems with those countries. This will enable evidence-informed risk assessments and rapid response plans to be developed.”¹⁴⁴
- The Agriculture and Horticulture Development Board suggested that the risk “could be offset to some extent by the ability to have a different list of priority pests than the current EU one”.¹⁴⁵ This will be considered further in Chapter 7.
121. **Although Brexit provides an opportunity for the UK to pursue trade deals with countries outside the EU, it is vital that these deals do not compromise the UK’s biosecurity. Any new trade deals must include measures to protect the UK from their biosecurity risks.**

138 [Q 3](#); also written evidence from the National Pig Association ([PAB0032](#)).

139 Written evidence from NFU ([PAB0031](#))

140 [Q 41](#)

141 [Q 10](#); also written evidence from Anglian Water Services ([PAB0006](#)), Prospect Union ([PAB0008](#)), the Equine Disease Coalition and British Equine Veterinary Association ([PAB0015](#)), RSPB ([PAB0024](#)) and Wildlife and Countryside Link ([PAB025](#))

142 Written evidence from Royal Botanic Garden Edinburgh ([PAB0038](#))

143 [Q 22](#)

144 Written evidence from British Ecological Society ([PAB0023](#))

145 Written evidence from Agriculture and Horticulture Development Board ([PAB0017](#))

Audits outside the UK

122. Managing the risks inherent in trade will require active oversight of standards in trading partners. These could potentially include EU Member States, as the National Pig Association pointed out:

“Depending on the resultant trade agreement with the EU, it may be necessary for the UK to resource its own audits of EU Member States to ensure they are complying with the necessary rules regarding animal health, food safety and biosecurity, especially if requirements substantially diverge from what is already required by EU law. Similarly, the UK will also need to conduct compliance audits in third countries exporting to the UK. This activity is likely to require substantial and dedicated resource.”¹⁴⁶

123. Dr Christine Middlemiss, Defra’s Chief Veterinary Officer, noted that in terms of animal trade there were “a number of information sources out there”, such as the World Organisation for Animal Health’s (OIE) independent inspection regime. She noted that at present “the EU undertakes a lot of that inspection” and publishes its results.¹⁴⁷ The Equine Disease Coalition and British Equine Veterinary Association therefore argued that “there could be resource challenges associated with [conducting third country audits] and the risk of unnecessary duplication of effort and cost”.¹⁴⁸ Lesley Griffiths AM, Cabinet Secretary for Energy, Planning and Rural Affairs in the Welsh Government, emphasised that “there will also need to be a body to replicate the audit and advisory support, post EU exit ... Audit by a credible independent body is essential to assess our animal and plant health standards to support our global trade interests.”¹⁴⁹
124. The numbers of staff required to support such an audit function is likely to be relatively small. Dr Middlemiss said that “at a guess, it would be tens”.¹⁵⁰ Similarly, Chief Plant Health Officer Prof Spence told us: “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.”¹⁵¹
125. **As an EU Member State, the UK currently relies on EU inspections and audits to ensure biosecurity standards in non-EU countries are being met, reducing the biosecurity risks posed by trade. We anticipate that the Government will need to resource its own audits post-Brexit, but the extent of this obligation will depend on the details of the final trade agreement between the UK and the EU, and on the terms of trade agreements struck with third countries.**

146 Written evidence from National Pig Association ([PAB0032](#))

147 [Q 37](#)

148 Written evidence from Equine Disease Coalition and British Equine Veterinary Association ([PAB0015](#))

149 Written evidence from Welsh Government ([PAB0033](#))

150 [Q 37](#)

151 *Ibid.*

CHAPTER 5: STAFF

EU Veterinarians

126. Dr Christine Middlemiss, Defra’s Chief Veterinary Officer, acknowledged that “within the food chain, a vast majority of vets working are of non-UK origin”.¹⁵² The British Veterinary Association (BVA) added that the majority of these vets were from the EU.¹⁵³ Restrictions on the right of EU citizens to live and work in the UK could therefore have a significant impact, as the Equine Disease Control and British Equine Veterinary Association pointed out:
- “A shortage of vets will have an adverse effect on disease surveillance, disease control measures, risk of disease incursions, control of an exotic disease emergency, domestic food safety, loss of high quality reputation for exports and animal disease research. This at a time when the potential loss of harmonised disease controlled trade movements between EU and the UK will increase the need for veterinary checks and certification to maintain our biosecurity.”¹⁵⁴
127. The BVA argued that “it will be vital that an appropriate number of veterinary surgeons can be recruited from overseas, whether from the EU post-Brexit or from outside the EU, to ensure that essential veterinary work continues”.¹⁵⁵ Dr Simon Doherty from the BVA agreed: “We have asked for vets to be restored to the shortage occupation list and for the veterinary profession to be prioritised in any future immigration policy.”¹⁵⁶
128. In response to the concerns we raised over the UK’s veterinarian workforce in our *Brexit: agriculture* report, Defra Minister George Eustice MP told us in June 2017: “The Government has announced its intention to commission advice from the Migration Advisory Committee to better understand the reliance on EU migrant workers across the economy.”¹⁵⁷ The Migration Advisory Committee’s report on *EEA migration in the UK* has since been published,¹⁵⁸ but makes no direct reference to the veterinary sector.
129. **In our report *Brexit: agriculture*, we brought the Government’s attention to the overwhelming reliance of the agricultural sector on EU citizens providing official veterinarian services. These veterinarians also play vital roles throughout the process of maintaining the UK’s biosecurity. We call on the Government to take steps as a matter of urgency to ensure that both the public and private sectors are able to retain or recruit qualified veterinarians to maintain the UK’s biosecurity post-Brexit.**

152 [Q 36](#)

153 Written evidence from British Veterinary Association ([PAB0013](#))

154 Written evidence from Equine Disease Control and British Equine Veterinary Association ([PAB0015](#))

155 Written evidence from British Veterinary Association ([PAB0013](#))

156 [Q 22](#)

157 Department for Food, Environment and Rural Affairs, *Government response to the House of Lords EU Energy and Environment Sub-Committee report into Brexit: Agriculture* (June 2017) p 12: <https://www.parliament.uk/documents/lords-committees/eu-energy-environment-subcommittee/Brexit-agriculture/Gov-response-Brexit-Ag.pdf> [accessed 13 August 2018]

158 Migration Advisory Committee, *EEA Migration in the UK*, (September 2018): https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/741926/Final_EEA_report.PDF [accessed 2 October 2018]

Public sector capacity

130. Brexit will also affect the staffing of public sector bodies. The British Ecological Society were “concerned with the UK’s ability to deliver an effective IAS strategy given the diminished budget of Defra by over a half over the past decade”.¹⁵⁹ Prospect Union agreed:

“Government agricultural and environmental bodies are not facing Brexit in the best of health. Despite 80% of Defra’s work being ‘framed’ by the EU, staffing levels have fallen by around a third since 2010 and, in real terms, its resource budget has been cut by a third since 2010/11 ... Even though the Treasury has granted Defra more funding to help with Brexit work, this additional amount is less than the cut to its funding announced in the 2015 Spending Review.”¹⁶⁰

131. Dr Doherty concurred: “There is no doubt that over the last number of years there has been a reduction in the resource made available to the Animal and Plant Health Agency in relation to the surveillance for animal diseases.”¹⁶¹

132. Defra Minister Lord Gardiner informed us: “We have recruited 1,250 additional staff across the Defra group. I cannot give precise numbers as to the varying parts.”¹⁶² In its written evidence Defra asserted:

“The Government has a full suite of specialists deployed to ensure strong biosecurity arrangements. This includes scientific specialists, inspection and assurance teams in the Animal and Plant Health Agency (APHA); the Food Standards Agency (FSA); and the Forestry Commission. Taken together, this provides an exceptional capability, in terms of knowledge, skills and delivery, across the animal and plant health, invasive-non-native species and food biosecurity field.”¹⁶³

133. Public sector capacity is also an issue for the devolved nations, not least because of uncertainty over the precise division of responsibility between central and devolved authorities. The Scottish Government told us:

“Withdrawal from the EU will require significant resources to replace functions currently delivered by the European Commission and risks exposing Scotland to disease incursion due to the potential loss of timely notification of incidents, information and expertise. At present it is unclear who will carry out this work.”¹⁶⁴

134. The Environmental Law Implementation Group at the Irish Environmental Network raised similar concerns:

“In Northern Ireland the previous Department with responsibility for the Environment in recent years has undergone a number of significant cuts prior to its incorporation or amalgamation with the Department with responsibility for Agriculture and Rural Affairs ... DAERA has additionally lost over 400 staff as result of a Voluntary Exit Scheme. Of particular concern is the loss of significant expertise and experience, and scientific knowledge which are critical to effective engagement on

159 Written evidence from British Ecological Society ([PAB0023](#))

160 Written evidence from Prospect Union ([PAB0008](#))

161 [Q 17](#)

162 [Q 47](#)

163 Written evidence from Department for Environment, Food and Rural Affairs ([PAB0018](#))

164 Written evidence from Scottish Government ([PAB0039](#))

complex matters such as biosecurity and IAS, and where actual practical experience in dealing with or avoiding issues can be invaluable.”¹⁶⁵

135. **We welcome the recent recruitment within Defra to help ensure the Department is prepared to take over responsibility for both delivery and policy formation from the EU. But despite this increase in resources witnesses remained concerned about Defra’s capacity to maintain biosecurity standards post-Brexit. We call on the Department to ensure that enough appropriately-trained staff are dedicated to the issue of biosecurity.**
136. **The Government must clarify and secure agreement on the division of biosecurity responsibility between central and devolved bodies, in order to enable the devolved administrations to plan effectively and recruit the necessary staff.**

Biosecurity specialists

137. According to the Royal Society of Biology:

“Following Brexit, the recruitment of staff with specialist skills to the UK workforce could become more difficult, for example in the fields of toxicology, taxonomy, ecological and landscape management, pathology, epidemiology, animal welfare, and carcass and food hygiene inspection. In some sectors, non-UK nationals comprise a high proportion of the current workforce.”¹⁶⁶

Border inspections

138. The additional inspections that are likely to be required at the UK border post-Brexit will need staff to carry them out. Prospect Union argued that “there will most likely need to be large increase in Plant Health Import Inspectors to manage certification and physical checks on imports. This could include the establishment of new permanent facilities at ports and other locations only currently staffed on an occasional basis.” They also highlighted that a shortfall in inspectors might lead to “significant quantities of material given free uninspected access to the UK”.¹⁶⁷
139. Dr Matt Elliot from the Woodland Trust echoed this point: “I have said a few times that we need investment in personnel. I believe that we have somewhere in the region of about 20 or so plant health inspectors at our borders. They have to check all the consignments, as compared to something like 700 in New Zealand. That is the kind of level we need to get to.”¹⁶⁸
140. **Without adequate plant and animal health inspectors at the border, it will not be possible to maintain the UK’s biosecurity. We recommend that the Government review the skills required to maintain biosecurity, and publish its findings, and its plans for addressing any gaps, as a matter of urgency.**

165 Written evidence from Environmental Law Implementation Group at the Irish Environmental Network ([PAB0045](#))

166 Written evidence from Royal Society of Biology ([PAB0035](#)); also written evidence from Fera Science Ltd ([PAB0009](#))

167 Written evidence from Prospect Union ([PAB0008](#))

168 [Q 21](#)

Training

141. Prospect Union was concerned that new staff might not be properly trained:

“In effect, there will be neither the staff nor the time to train new staff to current standards. APHA appears to have already decided the future training will focus on online rather than current face-to-face training. This change is being driven by capacity and budget constraints not best practice ... Increasing the pressure on inspectors, without the resources, and moving to online training, could mean unnecessary delays to goods as trainees adopt a more precautionary approach and hold materials for further laboratory tests.”¹⁶⁹

Wildlife and Countryside Link shared this concern: “We are concerned that Government will not invest sufficiently in the ... training required to ensure biosecurity standards are strengthened post Brexit.”¹⁷⁰

142. **It will be challenging to train newly-recruited biosecurity inspectors to the necessary standard by the date the UK leaves the EU. It is therefore vital that the UK’s post-Brexit immigration system allows EU nationals to continue to play a role in delivering biosecurity services, and we call on the Government to enable this.**

169 Written evidence from Prospect Union ([PAB0008](#))

170 Written evidence from Wildlife and Countryside Link ([PAB0025](#))

CHAPTER 6: A PAN-UK FRAMEWORK

Current differences in approach

143. As Defra explained, “Animal health, plant health and invasive non-native species management are areas of devolved competency ... Each part of the UK has responsibility for its own biosecurity but also contributes to the UK’s overall biosecurity.”¹⁷¹ The management of the UK’s external border, however, is a reserved matter.
144. This division of responsibility is currently underpinned by the UK’s EU membership. As the National Pig Association pointed out, “The approach taken to managing biosecurity risks already varies across the UK, but within the context of an overarching EU framework which ensures the same risks are identified and managed.”¹⁷² Dr Kezia Barker, Lecturer in Geography at Birkbeck, University of London, emphasised the flexibility that this approach facilitated: “There is always the aspiration to uniformity in biosecurity practice but arguably the way in which internal pest management has been devolved makes possible flexible approaches.”¹⁷³ The Agriculture and Horticulture Development Board gave the example of “compulsory programmes for Bovine Virus Diarrhoea elimination in Scotland and Northern Ireland but voluntary programmes in England and Wales”.¹⁷⁴

A UK framework

145. According to Defra, the loss of the underpinning provided by EU law means that “when we are no longer subject to this EU law, we may need to introduce new frameworks to ensure consistency across the UK in some policy areas”.¹⁷⁵
146. All witnesses who commented on this issue supported some form of UK framework for managing biosecurity post-Brexit. According to the Woodland Trust: “The development of a UK wide common biosecurity framework is essential in order for the various elements of a biosecurity strategy to function effectively.”¹⁷⁶
147. The RSPB pointed out:
- “It would be undesirable for an invasive non-native species to be legally imported and/or kept and traded in one part of the UK while these activities were restricted in another—as a lack of internal border controls could potentially undermine the goals of one or more of the UK’s administrations.”¹⁷⁷

Similarly, the Agriculture and Horticulture Development Board argued that “pests, weeds and diseases do not respect borders and to not have a coherent, common framework would be foolhardy in the extreme”.¹⁷⁸ The Centre for

171 Written evidence from Department for Environment, Food and Rural Affairs ([PAB0018](#))

172 Written evidence from National Pig Association ([PAB0032](#))

173 [Q 11](#)

174 Written evidence from Agriculture and Horticulture Development Board ([PAB0017](#))

175 Written evidence from Department for Environment Food and Rural Affairs ([PAB0018](#))

176 Written evidence from Woodland Trust ([PAB0030](#))

177 Written evidence from RSPB ([PAB0024](#)); also written evidence from Anglian Water Services ([PAB0006](#)), Confor ([PAB0011](#)), the British Veterinary Association ([PAB0013](#)), the Equine Disease Control and British Equine Veterinary Association ([PAB0015](#)), Wildlife and Countryside Link ([PAB0025](#)), Prof James Brown ([PAB0027](#))

178 Written evidence from Agriculture and Horticulture Development Board ([PAB0017](#))

Environment, Fisheries and Aquatic Science (CEFAS) noted that the same logic applies to biosecurity in the marine environment.¹⁷⁹

148. Others justified a common biosecurity framework on commercial grounds. The Royal Horticultural Society stated: “Having a shared set of standards across UK and the devolved administrations would help and support business to operate across borders.”¹⁸⁰ The CLA agreed: “A common biosecurity framework across the UK will be essential. It would ... place vast amounts of additional costs on businesses and government to have different frameworks between devolved administrations.”¹⁸¹
149. Furthermore, the Agriculture and Horticulture Development Board noted that “it is likely that developing agreements on bilateral standards for trade in animals and animal products can only realistically be undertaken at a UK level”.¹⁸² The City of London Corporation agreed that “a common biosecurity network across the UK is essential for ease of exporting to both European and global markets”.¹⁸³
150. Dr Lydgate and Dr Amos suggested that “there must be a notification procedure established so that the relevant bodies responsible for responding to sightings of invasive alien species in the devolved administrations are aware of potential threats”.¹⁸⁴ They added: “Ideally, a common response strategy should also be adopted ... There would be little point in England adopting a policy of eradication against a particular species, for example, if Scotland was only trying to contain its spread.”¹⁸⁵ The Wildlife and Countryside Link argued that a common framework should include common rules on the release of plants and animals into the wild,¹⁸⁶ while the RSPB underlined the importance of common rules on invasive non-native species.¹⁸⁷
151. But a common framework might be no more than that—a framework, allowing a degree of local and regional autonomy. Fera argued that “there needs to be recognition of the distinct nature of the agricultural and environmental context that prevails in each country”.¹⁸⁸ The Royal Botanic Garden Edinburgh agreed: “This framework, should, however, recognise the different priorities, assets, and susceptibilities faced by different nations within the UK.”¹⁸⁹
152. Lesley Griffiths AM, Cabinet Secretary for Energy, Planning and Rural Affairs in the Welsh Government, set out a similar approach:

“The Welsh Government supports the continued close cooperation between all UK administrations to support the UK’s overall biosecurity to maintain current health status as a minimum. We will continue to work collaboratively with the other UK administrations to explore whether framework arrangements are required across the UK. These

179 Written evidence from Centre for Environment, Fisheries and Aquatic Science ([PAB0044](#))

180 Written evidence from Royal Horticultural Society ([PAB0020](#))

181 Written evidence from Country Land and Business Association ([PAB0004](#)); also written evidence from the Horticultural Trades Association ([PAB0022](#))

182 Written evidence from Agriculture and Horticulture Development Board ([PAB0017](#))

183 Written evidence from City of London Corporation ([PAB0021](#))

184 Written evidence from Dr Lydgate and Dr Amos ([PAB0037](#))

185 *Ibid.*

186 Written evidence from Wildlife and Countryside Link ([PAB0025](#))

187 Written evidence from RSPB ([PAB0024](#))

188 Written evidence from Fera Science Ltd ([PAB0009](#))

189 Written evidence from Royal Botanic Garden Edinburgh ([PAB0038](#))

would need to be robust enough to protect the UK from animal and plant health diseases and prevent incursion of invasive non-native species and which also recognise and enable the variations required by each country.”¹⁹⁰

153. The Scottish Government agreed:

“There will continue to be a need for close working between the Scottish Government and the other administrations in the UK, in particular those in England and Wales ... However it is essential that future joint working is on a basis that fully respects devolution post-Brexit, with all powers relevant to devolved areas repatriated from the EU coming to Scotland and any UK-wide actions being by agreement and not imposition.”¹⁹¹

154. Defra emphasised only that, in the context of Brexit, “The Government has committed to preserve the existing decision making powers of the devolved administrations.”¹⁹² The Government’s ‘frameworks analysis’ of the areas of EU law that intersect with devolved competence acknowledged that both plant and animal health are “areas that are subject to more detailed discussion to explore whether legislative common framework arrangements might be needed”.¹⁹³

155. The existence of an EU biosecurity framework helps to ensure the UK’s biosecurity measures are effective aids in establishing trade agreements to which the UK is party, and makes it easier for companies to move products within the UK without additional bureaucracy. We heard strong support for establishing a similar UK-wide framework post-Brexit.

156. It will be important for all the relevant devolved administrations to play a full role in developing a UK-wide biosecurity framework, and for the result to allow for variations between the UK’s regions—where ecological and geographical differences give rise to different biosecurity vulnerabilities and solutions—without creating internal borders.

Action so far

157. Extensive biosecurity coordination already takes place between the nations and regions of the UK. Professor Nicola Spence, Defra’s Chief Plant Health Officer, said:

“In the Chief Veterinary Officer’s network and in the Chief Plant Health Officer’s network, we work together to coordinate 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.”¹⁹⁴

190 Written evidence from Welsh Government ([PAB0033](#))

191 Written evidence from Scottish Government ([PAB0039](#))

192 Written evidence from Department for Environment, Food and Rural Affairs ([PAB0018](#))

193 Cabinet Office, *Frameworks Analysis: Breakdown of areas of EU law that intersect with devolved competence in Scotland, Wales and Northern Ireland* (March 2018), pp 22 and 33: <https://www.gov.uk/government/publications/frameworks-analysis> [accessed 21 August]

194 [Q 38](#)

158. Defra detailed additional existing coordination activities:

“Policy officials across all of the administrations have developed joint working groups and joint strategies for disease control, including a published UK Contingency plan. The Animal and Plant Health Agency (APHA) is an executive agency, sponsored by Defra in England and also works on behalf of the Scottish Government and Welsh Government. The Food Standards Agency is responsible for public health protection in relation to food in England, Wales and Northern Ireland.”¹⁹⁵

159. Welsh Government Minister Ms Griffiths stated:

“We are already working collaboratively with the other UK administrations to explore the need for a collaborative framework that will enable adjustments to certain aspects of the EU approach to biosecurity ... Mechanisms which allow a shared approach to biosecurity between the UK ... in terms of sharing information on food safety and food-borne disease outbreak post Brexit are currently being considered.”¹⁹⁶

160. Lord Gardiner described further work undertaken on invasive species within the British-Irish Council, which includes all devolved nations and regions, the Republic of Ireland, the Isle of Man, Guernsey and Jersey.¹⁹⁷ Defra confirmed that discussions regarding post-Brexit biosecurity included the Crown Dependencies, “to identify where Defra can support them on the work needed to ensure their operational readiness”, and “to deliver to maintain or improve biosecurity standards and facilitate the fullest possible trade”.¹⁹⁸

Island of Ireland

161. Northern Ireland may, for some purposes at least, need to stand outside a ‘UK framework’ for biosecurity. As the Equine Disease Coalition and British Equine Veterinary Association pointed out, “GB is a single epidemiological unit and NI/ROI is a single epidemiological unit with disease outbreaks reflecting that.”¹⁹⁹ This was confirmed by Northern Ireland’s Department of Agriculture, Environment and Rural Affairs:

“As Northern Ireland (NI) and Ireland (IE) share a single island land mass, protected by water, it is sensible for certain animal diseases and in certain circumstances, for both NI and IE to adopt a similar approach to disease surveillance, prevention and control. The same approach applies to plant diseases and to tackling potentially environmentally damaging issues and protecting habitats and species native to the island.”²⁰⁰

162. The Environmental Law Implementation Group at the Irish Environmental Network pointed out: “While there has been substantial rhetoric on the

195 Written evidence from Department for Environment, Food and Rural Affairs ([PAB0018](#))

196 Written evidence from Welsh Government ([PAB0033](#))

197 [Q 47](#)

198 Written evidence from Department for Environment, Food and Rural Affairs ([PAB0043](#))

199 Written evidence from Equine Disease Coalition and British Equine Veterinary Association ([PAB0015](#))

200 Written evidence from Department of Agriculture, Environment and Rural Affairs ([PAB0041](#)); also written evidence from Dogs Trust ([PAB0016](#)), Agriculture and Horticulture Development Board ([PAB0017](#)), City of London Corporation ([PAB0021](#)), RSPB ([PAB0024](#)), Wildlife and Countryside Link ([PAB0025](#)), Royal Botanic Garden Edinburgh ([PAB0038](#)), Centre for Environment, Food and Rural Affairs ([PAB0044](#)), Environmental Law Implementation Group at the Irish Environmental Network ([PAB0045](#))

matter of not-treating NI any differently to the rest of the UK—the simple fact is—it already is treated differently from a regulatory and access point of view to the rest of the UK and has had devolved powers.”²⁰¹

163. Witnesses identified a number of existing cross-island biosecurity initiatives, including the joint ‘Invasive Species Ireland’ project,²⁰² cooperation on diagnostic testing facilities,²⁰³ intergovernmental cooperation on an all-island disease surveillance report,²⁰⁴ the Marine Pathways group,²⁰⁵ and an all-island approach to plant health.²⁰⁶

164. The question of how to avoid a ‘hard border’ on the island of Ireland, of which biosecurity is one component, is central to the Brexit negotiations, and was explored in our report *Brexit: UK-Irish relations*.²⁰⁷ Dr Emily Lydgate, Lecturer in Environmental Law at the University of Sussex, explained:

“EU law requires that all live animals from third countries be subject to veterinary checks at designated border posts. There are thousands of live animals moving freely across the intra-Irish border now. How would we avoid the need for veterinary checks and other types of sanitary and phytosanitary inspection? This is an area of significant disagreement between the UK and the EU.”²⁰⁸

165. The British Veterinary Association believed that the imposition of biosecurity inspections on the border between Northern Ireland and the Republic of Ireland “could reduce the efficiency of traffic moving across the border”.²⁰⁹ Dr Robert Black from the Natural Resources Institute was concerned that the requirement for phytosanitary and veterinary certificates “could affect the trade in live animals, fresh meat, dairy, semen for animal rearing and also be a threat to the UK’s horseracing industry because at the moment there is free movement of horses from Ireland”.²¹⁰

166. The Environmental Law Implementation Group at the Irish Environmental Network also raised concerns about the equine industry, including horse racing and breeding:

“These involve not just the transit of animals across the Irish Sea, but the transit of the associated actors and paraphernalia. So people, boots, straw, vehicles move over and back between the UK and ROI and indeed elsewhere. All of which can present and carry risks from one jurisdiction to another. Any change or diminution in the UK’s regulatory approach could have fatal consequences for such interactions, equally with dog racing, dog shows, show jumping etc.”²¹¹

201 Written evidence from Environmental Law Implementation Group at the Irish Environmental Network ([PAB0045](#))

202 Written evidence from Wildlife and Countryside Link ([PAB0025](#))

203 Written evidence from Fera Science Ltd ([PAB0009](#))

204 [Q 23](#) (Dr Simon Doherty)

205 Written evidence from Centre for Environment, Food and Rural Affairs ([PAB0044](#))

206 Written evidence from Department for Environment, Food and Rural Affairs ([PAB0018](#))

207 European Union Committee. *Brexit: UK-Irish relations* (6th Report, Session 2016–17, HL Paper 76)

208 [Q 2](#)

209 Written evidence from British Veterinary Association ([PAB0013](#))

210 [Q 11](#)

211 Written evidence from Environmental Law Implementation Group at the Irish Environmental Network ([PAB0045](#))

167. The Microbiology Society therefore concluded:

“Members in both the UK and Republic of Ireland stress links between the countries must remain strong to ensure that bilateral scientific collaboration, including in animal and plant health, continues to thrive. Coordinated information sharing and collaborative research programmes will remain vital for biosecurity on the island of Ireland.”²¹²

168. **We urge the Government to reach an arrangement which maintains the treatment of the island of Ireland as a single epidemiological unit.**

212 Written evidence from Microbiology Society ([PAB0034](#))

CHAPTER 7: IMPROVING THE UK'S BIOSECURITY

Problems with current biosecurity arrangements

169. Existing biosecurity arrangements are far from perfect, as the number of threats in recent years to animal and plant health testifies.²¹³ In the past, as Dr Robert Black from the Natural Resources Institute noted, what is sometimes referred to as the ‘weakest link’ issue may have been a contributory factor:
- “Some countries or particular points of entry used to be regarded as a soft touch for importing some plant material such as cut flowers and so on that would ultimately end up in the UK from third countries because they did not have adequate inspections. They could come by lorry all the way through into the UK. That has been tightened up considerably.”²¹⁴
170. As described in Chapter 1, as an EU Member State the UK has a limited ability to take its own biosecurity measures. Nonetheless, Professor Clive Brasier saw Brexit as “an opportunity to significantly tighten biosecurity and eliminate the ‘weakest link’ issue prevalent in the EU”, claiming that “our island status favours such an approach”.²¹⁵ He argued that “timely notification by countries with a ‘new’ pest or disease ... often fails due to lack of political will”, on the grounds that reporting such a disease would affect a country’s trade interests.²¹⁶ He also reported “tardiness in identifying the true scientific status of the organism ... [because labs are] often overloaded or poorly funded”.²¹⁷
171. The white paper on *The Future Relationship Between the United Kingdom and the European Union* has clarified that the Government’s preferred relationship with the EU would be one in which a “common rulebook” would maintain harmonised rules on goods which would otherwise need to be checked at the border, including those which “safeguard human, animal and plant health”.²¹⁸ This would allow near-frictionless trade with the EU to continue, but would limit the opportunities for new and stronger approaches to biosecurity that some of our witnesses identified.
172. **Membership of the Single Market required the UK to share a biosecurity regime with the EU. The Government will need to choose between maintaining that alignment for the sake of trade, and taking alternative approaches to strengthen its biosecurity once it is no longer constrained by EU policy. The need to facilitate trade post-Brexit must not be allowed to compromise the UK’s biosecurity.**

Possible improvements

Taking action faster

173. Dr Christine Middlemiss, Defra’s Chief Veterinary Officer identified “a number of areas where we might want to take increased action quicker than

213 Written evidence from Majestic Trees ([PAB0026](#)) and Buglife ([PAB0007](#))

214 [Q 3](#); also written evidence from Ornamental Aquatic Trade Association ([PAB0002](#))

215 Written evidence from Prof Clive Brasier ([PAB0028](#))

216 *Ibid.*

217 *Ibid.*

218 [The Future Relationship Between the United Kingdom and The European Union](#), Cm 9593, July 2018, p 23 [accessed 18 August]

the EU has done”.²¹⁹ The City of London Corporation concurred, positing that a UK alternative to the Rapid Alert System for Food and Feed “could enable risks to be controlled earlier, as currently it takes too long for potentially hazardous food and feed to be placed on the high-risk list, or banned”.²²⁰ Professor Nicola Spence, Defra’s Chief Plant Health Officer, underlined that it had taken “months” for the EU to consider placing restrictions on Spanish potatoes to prevent the spread of the potato flea beetle, warning “months can be critical”.²²¹

174. Lord Gardiner agreed:

“I would suggest that one of the ways in which we have an ability to become ever more biosecure is the ability for the Chief Veterinary Officer, or the Chief Plant Health Officer, or the head of the non-native species secretariat, immediately to come to a Minister and say, ‘this has come up on the horizon; this is a problem. Should we be doing something about it?’ If their advice is that we should, we have the ability to act more speedily.”²²²

175. **After Brexit it may be possible for the UK to respond more quickly to newly-identified biosecurity threats, rather than waiting for EU institutions and 28 Member States to agree on an appropriate course of action.**

Taking UK-specific action

176. According to the Royal Horticultural Society: “The most obvious positive step for legislative change is to prioritise UK biosecurity activities to UK, rather than EU needs.”²²³

177. This could include creating a UK list of Invasive Alien Species, and adding species which are present in the EU but have yet to reach the UK. Defra pointed out that “maintaining freedom from plant pests such as the oak processionary moth and tobacco whitefly are important UK priorities, but not for those countries which already have the pests”.²²⁴ Similarly, Anglian Water Services told us that post-Brexit the UK could place “a greater focus on species native to the EU that are or could be invasive in the UK”.²²⁵

178. Conversely, many witnesses highlighted the opportunity to remove species from the list that are a biosecurity risk in other Member States but not the UK. In the words of Dr Niall Moore, Defra’s Chief Non-Native Species Officer: “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.”²²⁶ Fera gave an example: “The UK focuses significant inspection effort on citrus fruit imports to protect the wider citrus industry in the south of Europe (especially Spain), but where there is little or no threat to the UK.” Relaxing such controls “should free up biosecurity resources to focus on

219 Q 39; also written evidence from Horticultural Trades Association (PAB0022) and Woodland Trust (PAB0030)

220 Written evidence from City of London Corporation (PAB0021)

221 Q 39

222 Q 49

223 Written evidence from Royal Horticultural Society (PAB0020)

224 Written evidence from Department for Environment, Food and Rural Affairs (PAB0018)

225 Written evidence from Anglian Water Services (PAB0006)

226 Q 39

areas perceived as a higher risk to the UK”.²²⁷ Mr Alan Bell pointed out that apple snails are prohibited in the EU as an invasive species,²²⁸ but argued that the UK was outside the risk area because of its colder climate, so could safely allow their import: “The UK has no reason whatsoever to fear the shell suited migrant molluscs with an EU ASBO.”²²⁹

179. **Depending on the nature of the UK’s post-Brexit relationship with the EU and its agencies, the UK may be able to establish its own lists of restricted species, both removing items on the EU lists that pose no threat to the UK, and adding items where doing so would improve the UK’s biosecurity. This would, however, have implications for the UK’s ability to trade freely with the EU.**
180. **Regardless of the nature of the UK’s future relationship with the EU, it is vital that alterations to the list of restricted species remain evidence-based.**

Additional restrictions

181. Many witnesses argued for additional constraints on goods coming into the UK and for enhanced inspections at the border. The Woodland Trust argued that “the UK should take the opportunity to take a stronger stance on protection of our unique habitats through improved UK legislation on border biosecurity”,²³⁰ while the British Ecological Society advocated “stricter border checks, tighter permit requirements, and restrictions or bans on certain high-risk imports to the UK”.²³¹
182. In our *Brexit: agriculture* report we highlighted the potential for non-tariff barriers to disrupt trade, creating an increased need for customs checks and the certification of products and production facilities.²³² In other words, additional controls on imports will come at a cost. Nonetheless, Defra appeared to agree with the views expressed by witnesses: “Depending on the exact nature of our future relationship, leaving the EU will provide an opportunity to examine how we can introduce stricter biosecurity measures on imports from remaining Member States.”²³³
183. The RSPB highlighted the opportunity to extend the Invasive Alien Species (IAS) List:

“The IAS List currently includes only 49 species. A recent peer-reviewed study found it would be advantageous to immediately begin the process of risk assessment for over 200 species potentially suitable for inclusion on The IAS List. However, gaining majority agreement among the Member States during the risk management process can be

227 Written evidence from Fera Science Ltd (PAB0009); also Q 4 (Dr Barker), Q 39 (Prof Spence), and written evidence from Prospect Union (PAB0008) and Agriculture, Horticulture Development Board (PAB0017)

228 Apple snails were first recorded in the wild in the EU in 2010, when they were reported in rice fields in the Ebro Delta in Spain, and are deemed to be a “threat to the freshwater wetlands of southern Europe”. See European Food Safety Authority, ‘Apple snail poses a serious threat to south European wetlands’: <https://www.efsa.europa.eu/en/press/news/140430a> [accessed 17 September 2018]

229 Written evidence from Mr Alan Bell (PAB0001); also written evidence from the Ornamental Aquatic Trade Association (PAB0002).

230 Written evidence from Woodland Trust (PAB0030)

231 Written evidence from British Ecological Society (PAB0023)

232 European Union Committee, *Brexit: agriculture*. (20th Report, Session 2016–17, HL Paper 169)

233 Written evidence from Department for Environment, Food and Rural Affairs (PAB0018)

politically challenging ... Consequently, a UK withdrawal from the EU potentially presents an opportunity to improve UK biosecurity, by rapidly increasing the number of species included on The IAS List.”²³⁴

184. Witnesses also had many suggestions for specific areas where additional safeguards could be introduced. These included:
- Pot plants, whose soil is “a key pathway for terrestrial invertebrate INNS [invasive non-native species]”;²³⁵
 - Products which risk importing *Xylella fastidiosa*, a plant bacterium;²³⁶
 - Firewood, which can carry fungi and insect eggs;²³⁷
 - Tick and tapeworm treatments and/or the reintroduction of rabies testing for cats and dogs being brought into the UK;²³⁸
 - Imports from Member States affected by African Swine Fever;²³⁹
 - The personal luggage allowance which currently allows travellers arriving from the EU to bring in plants, seeds and potentially contaminated meat.²⁴⁰
185. The Government told us that it would “explore options to enhance our biosecurity where it is possible to do so”, and specifically acknowledged the opportunity “to provide better protection against serious threats, such as *Xylella fastidiosa*”.²⁴¹
186. **The UK could consider the merits of implementing far stricter biosecurity controls than are currently in place, although this would have implications for trade agreements and appears to be at odds with the Government’s proposal to share a ‘common rulebook’ with the EU. Once the scope of the UK’s ability to adjust its arrangements in the context of its future relationship with the EU has been clarified, we urge the Government to consult on and conduct a scientific assessment of areas where it might be appropriate to impose additional biosecurity restrictions, particularly in relation to the threat posed by invasive species.**

Alternative approaches

187. The RSPB highlighted the opportunity to simplify the UK’s legislative framework for biosecurity: “For historical reasons, different biosecurity threats have their own legislative frameworks and resulting inspection and enforcement regimes. This is despite them undertaking broadly similar

234 Written evidence from RSPB (PAB0024); also Q 19 (Dr Walton), written evidence from Anglian Water Services (PAB0006)

235 Written evidence from Wildlife and countryside Line (PAB0025); also written evidence from Buglife (PAB0007), British Ecological Society (PAB0023), Prof Clive Brasier (PAB0028)

236 Written evidence from Woodland Trust (PAB0030) and NFU (PAB0031)

237 Written evidence from Confor (PAB0011) and Prof James Brown (PAB0027)

238 Written evidence from British Veterinary Association (PAB0013), Dogs Trust (PAB0016) and Welsh Government (PAB0033)

239 Written evidence from National Pig Association (PAB0032)

240 Q 39 (Prof Nicola Spence) Written evidence from Royal Horticultural Society (PAB0020), Written evidence from Prof Clive Brasier (PAB0028), Written evidence from National Pig Association (PAB0032)

241 Written evidence from Department for Environment, Food and Rural Affairs (PAB0018)

practical functions.”²⁴² They noted that this led to a “complicated network of responsible bodies”:

“Across the UK 20 Government Departments and Agencies have responsibility for biosecurity ... Communication and coordination between them is inevitably challenging and such an arrangement runs the risk of diluting responsibility for action and causing the inefficient use of resources.”²⁴³

188. The Wildlife and Countryside Link agreed: “Outside of the EU, the UK has the opportunity to rationalise its biosecurity legislation by reducing duplication of mechanisms and resources across disparate departments and agencies.”²⁴⁴ The British Ecological Society also sought greater legislative coherence: “Moving forward it would be beneficial to investigate the pros and cons of having a Biosecurity Act or similar piece of legislation which brings all the different pieces of legislation together to provide coherence and prevent any duplication of work.”²⁴⁵

189. The Woodland Trust went further, pointing out that “many novel organisms which have had an impact in the UK were previously unknown to science and therefore would not have appeared on any international risk-based lists before their introduction”.²⁴⁶ This led Dr Emily Lydgate, Lecturer in Environmental Law at the University of Sussex, to argue for a more radical change of approach:

“We would no longer be bound to provide freedom of movement to EU goods, so we could move towards Australia’s approach of regulating species introduction through a whitelist, which designates only the species that are allowed, rather than the EU’s blacklist approach, which designates the species that are not allowed.”²⁴⁷

190. **Brexit provides an opportunity for the Government to consider fundamentally altering its approach to managing biosecurity, moving away from a system based on a list of restricted items, which does not provide optimum protection against unknown risks, and towards a unified biosecurity policy across all sectors.**

Australia and New Zealand

191. Dr Kezia Barker, Lecturer in Geography at Birkbeck, University of London, described Australia and New Zealand as “world leading” in terms of biosecurity,²⁴⁸ while Dr Paul Walton from the RSPB told us that the rate of establishment of new species in New Zealand has “fallen off a cliff” since new biosecurity legislation was passed.²⁴⁹ According to the Woodland Trust, “New Zealand has been able to take advantage of its island status to protect indigenous species that are at risk from population decline or extinction

242 Written evidence from RSPB ([PAB0024](#))

243 *Ibid.*

244 Written evidence from Wildlife and Countryside Link ([PAB0025](#))

245 Written evidence from British Ecological Society ([PAB0023](#)); also written evidence from Woodland Trust ([PAB0030](#))

246 Written evidence from Woodland Trust ([PAB0030](#)); also written evidence from Prof Clive Brasier ([PAB0028](#))

247 [Q 3](#)

248 *Ibid.*

249 [Q 16](#)

through the introduction of invasive species.”²⁵⁰ The Agriculture and Horticulture Development Board agreed:

“The UK could look to Australia and New Zealand as examples of high standards in external biosecurity for island nations. Many will be familiar with sniffer dogs checking passengers and luggage for food at airports in New Zealand. It has previously been argued that the size and volume of flow renders this impractical at UK ports and airports. However, random risk targeted action by border patrols funded by heavy enforcement fines combined with more effective communication to travellers ... could be considered.”²⁵¹

192. Professor James Brown told us: “On the specific point of dirty clothing, the practice in Australia is to make sure that travellers know that clothes or footwear which has been worn on farms outside Australia must be cleaned before they are worn again at home. This is done at points of entry. This could easily be done in the UK.”²⁵²
193. The British Ecological Society pointed out that “New Zealand is investing in and empowering its citizens to play a critical role in managing and preventing biosecurity threats. The UK should continue to look into and invest in ways it can raise awareness among its citizens.”²⁵³
194. **The examples of Australia and New Zealand show that more restrictive regimes can be highly effective at maintaining biosecurity on remote island nations, particularly when legislation is combined with public awareness campaigns. While the UK is not so geographically isolated, and implementing a similar regime would require a substantial increase in biosecurity resourcing, the Government may wish to review the costs and potential benefits of such measures after the UK has left the EU.**

250 Written evidence from Woodland Trust ([PAB0030](#))

251 Written evidence from Agriculture and Horticulture Development Board ([PAB0017](#))

252 Written evidence from Prof James Brown ([PAB0027](#))

253 Written evidence from British Ecological Society ([PAB0023](#))

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

Introduction

1. Plant and animal diseases, and invasive non-native species, are a constant threat to the UK's ecology and economy. Ensuring effective biosecurity measures are in place is therefore of great and lasting importance. (Paragraph 5)
2. While operating under a global framework, and with some opportunities for national measures, much of the UK's biosecurity currently depends upon cooperation with the EU. (Paragraph 12)

Legislation

3. While the Government has stated that all EU biosecurity legislation will be transposed into domestic law using powers under the European Union (Withdrawal) Act 2018, the loss of the role of EU institutions enshrined in the legislation will create gaps that need to be filled. UK bodies will need to be given the necessary powers to carry out important biosecurity functions currently undertaken at EU level. We ask the Government to confirm whether the powers conferred on Ministers by Section 8 of the EU (Withdrawal) Act to address "deficiencies dealing with withdrawal" will be sufficient to enable Ministers to set up new agencies, or whether further primary legislation is needed. (Paragraph 23)
4. One biosecurity function that will need to be repatriated is food safety risk management. We call on the Government to provide clarity to the industry and the wider public on how this will be conducted when the UK leaves the EU, and when, if necessary, any legislation will be brought forward. It is important that the principle of keeping food safety decisions at arm's length from those Ministers who are responsible for dealing with the interests of food producers is maintained. (Paragraph 24)
5. We call on the Government to clarify how the list of Invasive Alien Species of Union concern, which is central to the Invasive Alien Species Regulation, will be updated and administered when the UK leaves the EU. (Paragraph 30)
6. We further recommend that, where bringing across EU biosecurity law through the EU (Withdrawal) Act requires the UK to replicate functions previously performed by EU institutions, the Government should commit to replicating the same level of rigour, transparency and accountability as exists at present. (Paragraph 31)
7. We welcome the commitment made by the Minister that the new EU Plant Health Law will be implemented in the UK, and call for similar clarity in respect of the EU Animal Health Law. (Paragraph 36)
8. As in other policy areas, the EU's biosecurity legislation includes a range of reporting requirements and checks to ensure Member States are complying with the law. The Commission also has the power to take legal action against countries that are failing to comply, including referral to the Court of Justice of the European Union, which can impose financial penalties. (Paragraph 41)
9. As we concluded in our *Brexit: environment and climate change* report, as well as bringing EU biosecurity legislation into UK law, the Government must

establish independent and effective domestic enforcement mechanisms to take on the role currently filled by the Commission. (Paragraph 42)

UK-EU cooperation

10. Given geographical proximity and the volume of trade and travel between the UK and the EU, continued cooperation is critical to the UK's future biosecurity. (Paragraph 49)
11. As an EU Member State, the UK currently receives pest and disease notifications that assist in maintaining the UK's biosecurity. While EU notifications are often made publicly available, relying on this after we leave the EU would mean the UK receiving notifications more slowly than it currently does as a Member State. (Paragraph 57)
12. We urge the Government therefore to seek continued participation in EU disease notification systems. Detailed provision also needs to be made for how the UK could maintain its biosecurity without full access to these systems. With only months to go before the UK leaves the EU, it is concerning that these provisions are not already in place. (Paragraph 58)
13. If the UK is unable to maintain access to the EU's disease notification systems, it will be able to draw on international sources of information. It is not clear, however, whether these would enable the UK to maintain its current level of biosecurity. (Paragraph 62)
14. The ability to trace the movements of animals and plants (and plant and animal products) is an important component of biosecurity. (Paragraph 66)
15. We note that work has already begun to create a UK replacement for the EU's TRACES system. Given the crucial role the system plays in minimising the biosecurity risks of trade and managing a disease outbreak when it occurs, it is crucial that the replacement system is ready by the time the UK leaves the EU in March 2019. (Paragraph 67)
16. Given that a stand-alone UK system would not benefit from the EU-wide intelligence contained in TRACES, the Government should also explore the potential to link a UK system to TRACES. (Paragraph 68)
17. We call on the Government to seek continued involvement in the Working Party of Chief Veterinary Officers (and the Working Party of Chief Plant Health Officers), so that both formal and informal biosecurity information sharing can continue. (Paragraph 71)
18. Assessing the risks posed by various biosecurity threats, and then deciding on an appropriate response, are functions currently undertaken predominantly at EU level. Post-Brexit, the UK will no longer be able to rely on the EU's risk assessment and risk management expertise. We urge the Government to ensure that the relevant UK bodies are adequately resourced, and have the necessary legal powers, to undertake these functions from March 2019. (Paragraph 79)
19. Collaborative work with researchers from across the EU strengthens the UK's biosecurity knowledge and expertise and can be an effective channel for informal information sharing. (Paragraph 88)
20. We note that the Government's proposal for the future UK-EU relationship includes continued cooperation on research and participation in EU research

funding programmes, and we welcome this inclusion. Given that such an agreement cannot be guaranteed, however, we call on the Government to evaluate the impact on the UK's biosecurity of any loss of joint EU research funding and to ensure alternative sources of funding are available to mitigate any risks identified. (Paragraph 89)

21. When the UK leaves the EU, UK laboratories will lose EU Reference Laboratory status. They will also lose the funding associated with that status, so it is paramount that the Government ensures UK laboratories are adequately funded to enable them to provide the necessary level of expertise to maintain the UK's biosecurity, and to support their continued work with other EU and international Reference Laboratories. (Paragraph 95)
22. As Reference Laboratories all have their own disease specialisms, the Government needs to ensure that the international Reference Laboratory network it will be relying on covers the full range of diseases in which the UK has an interest. (Paragraph 96)
23. We note the concerns over the loss of EU funding for environmental, nature conservation and climate action projects, many of which have significant biosecurity components. The Government will need to consider what additional resource is needed to continue the biosecurity activity currently funded by the EU. (Paragraph 99)

Trade and inspections

24. While phytosanitary certificates offer a high degree of biosecurity, they also entail a more rigorous administrative and inspection process than the plant passports currently used for the trade of plants between the UK and EU. Both Government and businesses will need to ensure they have sufficient resource to implement the change in regime at the point the UK leaves the EU. (Paragraph 105)
25. The UK will have to carry out more inspections of products at its borders post-Brexit to ensure it is not exposed to higher biosecurity risks. (Paragraph 113)
26. Doubt has been cast on whether there is sufficient infrastructure to carry out biosecurity inspections on goods arriving from the EU. We call on the Government urgently to clarify its plans for ensuring the necessary facilities will be available to maintain the passage of goods across the UK's borders. (Paragraph 114)
27. The need for these inspections could, however, be reduced if the Government were to place minimal checks on imports from the EU. We note, however, that the UK Government would at the very least be obliged to comply with WTO rules. In our *Brexit: food prices and availability* report we urged the Government to publish exactly what customs and border requirements it would put in place on EU food imports in that situation. We repeat that recommendation. (Paragraph 115)
28. A decision to place minimal checks on imports from the EU would need to be accompanied by a mechanism for monitoring the risks of such an approach as UK and EU rules diverge over time. (Paragraph 116)
29. Although Brexit provides an opportunity for the UK to pursue trade deals with countries outside the EU, it is vital that these deals do not compromise

the UK's biosecurity. Any new trade deals must include measures to protect the UK from their biosecurity risks. (Paragraph 121)

30. As an EU Member State, the UK currently relies on EU inspections and audits to ensure biosecurity standards in non-EU countries are being met, reducing the biosecurity risks posed by trade. We anticipate that the Government will need to resource its own audits post-Brexit, but the extent of this obligation will depend on the details of the final trade agreement between the UK and the EU, and on the terms of trade agreements struck with third countries. (Paragraph 125)

Staff

31. In our report *Brexit: agriculture*, we brought the Government's attention to the overwhelming reliance of the agricultural sector on EU citizens providing official veterinarian services. These veterinarians also play vital roles throughout the process of maintaining the UK's biosecurity. We call on the Government to take steps as a matter of urgency to ensure that both the public and private sectors are able to retain or recruit qualified veterinarians to maintain the UK's biosecurity post-Brexit. (Paragraph 129)
32. We welcome the recent recruitment within Defra to help ensure the Department is prepared to take over responsibility for both delivery and policy formation from the EU. But despite this increase in resources witnesses remained concerned about Defra's capacity to maintain biosecurity standards post-Brexit. We call on the Department to ensure that enough appropriately-trained staff are dedicated to the issue of biosecurity. (Paragraph 135)
33. The Government must clarify and secure agreement on the division of biosecurity responsibility between central and devolved bodies, in order to enable the devolved administrations to plan effectively and recruit the necessary staff. (Paragraph 136)
34. Without adequate plant and animal health inspectors at the border, it will not be possible to maintain the UK's biosecurity. We recommend that the Government review the skills required to maintain biosecurity, and publish its findings, and its plans for addressing any gaps, as a matter of urgency. (Paragraph 140)
35. It will be challenging to train newly-recruited biosecurity inspectors to the necessary standard by the date the UK leaves the EU. It is therefore vital that the UK's post-Brexit immigration system allows EU nationals to continue to play a role in delivering biosecurity services, and we call on the Government to enable this. (Paragraph 142)

A pan-UK framework

36. The existence of an EU biosecurity framework helps to ensure the UK's biosecurity measures are effective aids in establishing trade agreements to which the UK is party, and makes it easier for companies to move products within the UK without additional bureaucracy. We heard strong support for establishing a similar UK-wide framework post-Brexit. (Paragraph 155)
37. It will be important for all the relevant devolved administrations to play a full role in developing a UK-wide biosecurity framework, and for the result to allow for variations between the UK's regions—where ecological and

geographical differences give rise to different biosecurity vulnerabilities and solutions—without creating internal borders. (Paragraph 156)

38. We urge the Government to reach an arrangement which maintains the treatment of the island of Ireland as a single epidemiological unit. (Paragraph 168)

Improving the UK's biosecurity

39. Membership of the Single Market required the UK to share a biosecurity regime with the EU. The Government will need to choose between maintaining that alignment for the sake of trade, and taking alternative approaches to strengthen its biosecurity once it is no longer constrained by EU policy. The need to facilitate trade post-Brexit must not be allowed to compromise the UK's biosecurity. (Paragraph 172)
40. After Brexit it may be possible for the UK to respond more quickly to newly-identified biosecurity threats, rather than waiting for EU institutions and 28 Member States to agree on an appropriate course of action. (Paragraph 175)
41. Depending on the nature of the UK's post-Brexit relationship with the EU and its agencies, the UK may be able to establish its own lists of restricted species, both removing items on the EU lists that pose no threat to the UK, and adding items where doing so would improve the UK's biosecurity. This would, however, have implications for the UK's ability to trade freely with the EU. (Paragraph 179)
42. Regardless of the nature of the UK's future relationship with the EU, it is vital that alterations to the list of restricted species remain evidence-based. (Paragraph 180)
43. The UK could consider the merits of implementing far stricter biosecurity controls than are currently in place, although this would have implications for trade agreements and appears to be at odds with the Government's proposal to share a 'common rulebook' with the EU. Once the scope of the UK's ability to adjust its arrangements in the context of its future relationship with the EU has been clarified, we urge the Government to consult on and conduct a scientific assessment of areas where it might be appropriate to impose additional biosecurity restrictions, particularly in relation to the threat posed by invasive species. (Paragraph 186)
44. Brexit provides an opportunity for the Government to consider fundamentally altering its approach to managing biosecurity, moving away from a system based on a list of restricted items, which does not provide optimum protection against unknown risks, and towards a unified biosecurity policy across all sectors. (Paragraph 190)
45. The examples of Australia and New Zealand show that more restrictive regimes can be highly effective at maintaining biosecurity on remote island nations, particularly when legislation is combined with public awareness campaigns. While the UK is not so geographically isolated, and implementing a similar regime would require a substantial increase in biosecurity resourcing, the Government may wish to review the costs and potential benefits of such measures after the UK has left the EU. (Paragraph 194)

APPENDIX 1: LIST OF MEMBERS AND DECLARATIONS OF INTEREST

Members

Lord Cameron of Dillington (joined May 2018)
 Lord Curry of Kirkharle (resigned May 2018)
 Viscount Hanworth
 Lord Krebs
 Duke of Montrose
 Lord Rooker
 Lord Selkirk of Douglas
 Baroness Sheehan
 The Earl of Stair
 Lord Teverson (Chairman)
 Viscount Ullswater
 Baroness Wilcox
 Lord Young of Norwood Green

Declarations of interest

Lord Cameron of Dillington
Farmer and landowner
Chair of Strategic Advisory Board of Government's Global Food Security Programme
Chair of Board of Centre for Ecology and Hydrology
Lawes Trustee at Rothamsted Research

Lord Curry of Kirkharle
Partner in a farming business with livestock and crops
Trustee of Clinton Devon Estates

Viscount Hanworth
No relevant interests to declare

Lord Krebs
Scientific advisor to Marks and Spencer PLC and Tesco PLC

Duke of Montrose
Interest in agriculture and livestock production
Honorary Member of British Veterinary Association
Owner of land affected by invasive species and Special Protection Area under EU Habitat Directive
Former President of National Sheep Association

Lord Rooker
No relevant interests to declare

Lord Selkirk of Douglas
An interest in a small family company with agricultural lands and property, Douglas-Hamilton (D Share) Ltd, as a Director, with interests in small areas of land
Diversified investment portfolio in McInroy and Wood Income Fund, managed by a third party

Baroness Sheehan
No relevant interests to declare

The Earl of Stair
Interest in agriculture, horticulture and land management in addition to those interests recorded in the Register

Lord Teverson

Board Member, Marine Management Organisation

Trustee, the North Devon Biosphere Foundation

Viscount Ullswater

Salaried Trustee of a Landed Estate in Cumbria, which includes extensive farming interests

Baroness Wilcox

President, National Consumer Federation

Fisheries background

Lord Young of Norwood Green

No relevant interests to declare

The following members of the European Union Select Committee attended the meeting at which the report was approved:

Baroness Armstrong of Hill Top

Lord Boswell of Aynho

Baroness Brown of Cambridge

Baroness Browning

Lord Cromwell

Baroness Falkner of Margravine

The Earl of Kinnoull

Lord Liddle

Baroness Neville-Rolfe

Lord Risby

Baroness Suttie

Lord Teverson

Lord Whitty

During consideration of the report the following Members declared an interest:

Lord Boswell of Aynho

Honorary membership of the British Veterinary Association

Agricultural interests as they appear in the Register

Baroness Brown of Cambridge

Chair of Adaptation Sub-Committee of the Committee on Climate Change

Lord Cromwell

UK farmer with an interest in the effective operation of biosecurity systems

The Earl of Kinnoull

Chairman, Red Squirrel Survival Trust

Chairman, United Kingdom Squirrel Accord

Farming interests both in principal and as a Trustee

Baroness Neville-Rolfe

Chairman, Assured Food Standards

NED, Capita PLC

Shareholdings in Tesco and Amazon

Lord Whitty

Vice President, Chartered Institute of Trading Standards

A full list of Members' interests can be found in the Register of Lords' Interests: <https://www.parliament.uk/mps-lords-and-offices/standards-and-interests/register-of-lords-interests/>

APPENDIX 2: LIST OF WITNESSES

Evidence is published online at <https://www.parliament.uk/brexit-plant-animal-biosecurity> and available for inspection at the Parliamentary Archives (020 7219 3074).

Evidence received by the Committee is listed below in chronological order of oral evidence session and in alphabetical order. Those witnesses marked with ** gave both oral evidence and written evidence. Those marked with * gave oral evidence and did not submit any written evidence. All other witnesses submitted written evidence only.

Oral evidence in chronological order

*	Dr Kezia Barker, Birkbeck, University of London	QQ 1–12
*	Dr Robert Black, Natural Resources Institute (NRI)	QQ 1–12
**	Dr Emily Lydgate, University of Sussex	QQ 1–12
**	Dr Simon Doherty, British Veterinary Association (BVA)	QQ 13–24
**	Dr Matt Elliot, the Woodland Trust	QQ 13–24
**	Dr Paul Walton, RSPB	QQ 13–24
*	Professor Nicola Spence, Chief Plant Health Officer, Defra	QQ 25–39
*	Dr Christine Middlemiss, Chief Veterinary Officer, Defra	QQ 25–39
*	Dr Niall Moore, Chief Non-Native Species Officer, Defra	QQ 25–39
*	Professor Guy Poppy, Food Standards Agency	QQ 25–39
**	Lord Gardiner of Kimble, Parliamentary Under Secretary of State, Defra	QQ 40–49
*	Simon Hall, Director for EU Exit and Trade at the Animal and Health Agency, Defra	QQ 40–49

Alphabetical list of all witnesses

	Agriculture and Horticulture Development Board (AHDB)	PAB0017
	Anglian Water Services	PAB0006
	Aviagen UK Ltd	PAB0003
*	Dr Kezia Barker, Birkbeck, University of London (QQ 1–12)	
	Mr Alan Bell	PAB0001
*	Dr Robert Black, Natural Resources Institute (NRI) (QQ 1–12)	
	Professor Clive Brasier	PAB0028
	British Ecological Society	PAB0023

	British Egg Industry Council	PAB0040
	British Tomato Growers' Association	PAB0029
**	British Veterinary Association (BVA) (QQ 13–24)	PAB0013
	Professor James Brown	PAB0027
	Buglife	PAB0007
	Centre for Environment, Fisheries and Aquatic Science	PAB0044
	City of London Corporation	PAB0021
	Confor: Confederation of Forest Industries	PAB0011
	Country Land and Business Association (CLA)	PAB0004
	Cucumber Growers' Association	PAB0019
	DAERA	PAB0041
**	Department for Environment, Food and Rural Affairs (Defra) (QQ 40–49)	PAB0018 PAB0043
	Dogs Trust	PAB0016
	Environmental Law Implementation Group at the Irish Environmental Network	PAB0045
	Equine Disease Coalition and BEVA	PAB0015
	European Food Safety Authority (EFSA)	PAB0005
	Fera Science Ltd	PAB0009
**	Lord John Gardiner of Kimble Parliamentary Under Secretary of State, Defra (QQ 40–49)	PAB0042
*	Simon Hall, Director for EU Exit and Trade at the Animal and Health Agency, Defra (QQ 40–49)	
	Horticultural Trades Association	PAB0022
**	Dr Emily Lydgate (QQ 1–12) and Dr R Amos, University of Sussex	PAB0037
	Majestic Trees	PAB0026
	Microbiology Society	PAB0034
*	Dr Christine Middlemiss, Chief Veterinary Officer, Defra (QQ 25–39)	
*	Dr Niall Moore, Chief Non-Native Species Officer, Defra (QQ 25–39)	
	Moredun Research Institute	PAB0036
	National Pig Association (NPA)	PAB0032
	Newey Thinking	PAB0010
	National Farmers' Union (NFU)	PAB0031
	Ornamental Aquatic Trade Association	PAB0002
*	Professor Guy Poppy, Food Standards Agency (QQ 25–39)	

	Prospect Union	<u>PAB0008</u>
	Royal Botanic Garden Edinburgh	<u>PAB0038</u>
	Royal Horticultural Society	<u>PAB0020</u>
	Royal Society of Biology	<u>PAB0035</u>
**	RSPB (<u>QQ 13–24</u>)	<u>PAB0024</u>
	Scottish Government	<u>PAB0039</u>
	Society for Applied Microbiology	<u>PAB0012</u>
*	Professor Nicola Spence, Chief Plant Health Officer, Defra (<u>QQ 25–39</u>)	
	The Pirbright Institute	<u>PAB0014</u>
	Welsh Government	<u>PAB0033</u>
	Wildlife and Countryside Link	<u>PAB0025</u>
**	Woodland Trust (<u>QQ 13–24</u>)	<u>PAB0030</u>

APPENDIX 3: GLOSSARY

Acquis	The accumulated body of law (treaties, legislation, court decisions, principles etc)
ADNS	Animal Disease Notification System
AHDB	Agriculture and Horticulture Development Board
APHA	Animal and Plant Health Agency
ASBO	Anti-social behaviour order
BVA	British Veterinary Association
CEFAS	Centre for Environment, Fisheries and Aquaculture Science
CVO	Chief Veterinary Officer
DAERA	The Northern Ireland Department of Agriculture, Environment and Rural Affairs
Defra	Department for Environment, Food and Rural Affairs
DG SANTE	The Directorate-General for Health and Food Safety in the European Commission
EASIN NOTSYS	The European Alien Species Notification System
EFSA	European Food Safety Authority
EFTA	European Free Trade Association. The organisation promotes free trade between its members: Iceland, Liechtenstein, Norway and Switzerland
EPPO	European and Mediterranean Plant Protection Organization
EURL	European Union Reference Laboratory
European Commission	The Executive of the European Union. It draws up proposals for new legislation and budgets and ensures EU law is being properly applied
FAO	Food and Agriculture Organization of the United Nations
FMD	Foot and mouth disease
FSA	Food Standards Agency
IAS Regulation	EU Regulation 1143/2014 on invasive alien species
IE	Ireland
Invasive non-native species/ Invasive alien species	Animals and plants introduced accidentally or deliberately into a natural environment where they are not normally found, with serious negative consequences for their new environment
NFU	National Farmers Union
NI	Northern Ireland
NPA	National Pig Association

NRL	National Reference Laboratory
OIE	World Organisation for Animal Health
Phyto	Phytosanitary certificate. Issued to prove plant and plant products entering the EU are properly inspected and free from harmful organisms.
ProMED	The Program for Monitoring Emerging Diseases. Part of the International Society for Infectious Diseases, ProMED is an internet-based reporting system providing global notifications on disease outbreaks
RASFF	Rapid Alert System for Food and Feed
ROI	Republic of Ireland
Third Countries	Countries not part of the EU
TRACES	Trade Control and Expert System
WAHIS	World Animal Health Information System
Withdrawal Bill/ Act	Withdrawal Bill/ Act: the EU (Withdrawal) Act became law in June 2018 and aims to facilitate Brexit by transferring EU law into UK law.
WTO	World Trade Organization