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AUDITOR GENERAL

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Department for Environment, Food
and Rural Affairs and the Animal Health
and Veterinary Laboratories Agency

Improving the delivery of animal health and welfare services through the Business Reform Programme

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National Audit Office

Department for Environment, Food and Rural Affairs and
the Animal Health and Veterinary Laboratories Agency

Improving the delivery of animal health and welfare services through the Business Reform Programme

Report by the Comptroller and Auditor General

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Amyas Morse
Comptroller and Auditor General
National Audit Office

12 July 2012

This report examines the Animal Health and Veterinary Laboratories Agency's progress in implementing the Business Reform Programme, and the impact of the Programme to date.

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Key facts

£285m

spent by the Department and the devolved authorities in Scotland and Wales on animal health and welfare in 2011-12

27%

reduction in spend on animal health and welfare since 2005-06

>175

organisations deliver animal health and welfare services

- 10** significant animal disease outbreaks have affected Great Britain since 2001
- 68 per cent** of departmental spending on animal health and welfare was allocated to the Animal Health and Veterinary Laboratories Agency in 2011-12
- 4 per cent** of spending between 2005-06 and 2011-12 invested in the Business Reform Programme
- £103 million** is the total cost of the Business Reform Programme to 31 March 2012

Summary

1 Outbreaks of animal disease pose a risk to animals and humans. The outbreak of foot and mouth disease in 2001 cost the government an estimated £3 billion with further costs to the farming industry, tourism and the rural economy. New diseases and the unpredictability of outbreaks, including the recent outbreak of Schmallenberg, continue to challenge the farming industry, as well as those responsible for policy in the Department for Environment, Food and Rural Affairs (the Department).

2 Since the 2001 foot and mouth outbreak, animal health and welfare services have been closely scrutinised by the Committee of Public Accounts and other government reviews. Between 2003 and 2009, four of the Committee's reports recommended that the Department fundamentally improve its Information and Communications Technology (ICT), data quality, and sharing and management of costs and performance. They also recommended that the Department reduce the burden of inspections and introduce more efficient ways of working.

3 The Animal Health and Veterinary Laboratories Agency (the Agency) is the Department's arm's-length body mainly responsible for preventing and responding to disease outbreaks. Working with others, the Agency plays a central role in delivering animal health and welfare services. From offices across Great Britain, the Agency carries out welfare visits to farms and markets, tests for disease and provides advice to farmers on welfare and disease prevention.

4 The Agency is currently implementing the Business Reform Programme (the Programme) which it began in 2006. The Programme, which is being delivered incrementally as a series of eight 'releases', is intended to improve the quality of the Agency's data, upgrade its ICT, standardise and automate its processes and enable private vets to submit bovine tuberculosis test results online. The Agency has contracted IBM to develop and maintain the new ICT.

5 The Programme is important as it addresses many of the recommendations of the Committee of Public Accounts on improving the management of animal disease. This report, therefore, examines the Agency's progress in implementing the Programme and the impact of the Programme to date.

Key findings

6 Between 2005-06 and 2011-12, the Agency spent £103 million on the Business Reform Programme. This was 4 per cent of the total spending on animal health and welfare in Great Britain over the seven years. It was broadly in line with the original plans for implementing the scale of transformation required. With this investment the Agency has introduced fundamental changes to its operating model, business processes, ICT systems and information while maintaining day-to-day operations and its readiness for an emergency response.

7 The Agency and the Programme have benefited from stronger management following changes to the leadership team. The Agency's senior management team has changed since the start of the Programme, with new skills and experience being brought into the Agency. We found several examples of good practice in place. These included the Agency taking an incremental approach to change to minimise the risk of disrupting operations, and treating the Programme not just as an ICT project, but as a way to transform the Agency's business and culture.

8 The Programme is already delivering cost reductions. To date, the Agency has reduced headcount by 119 full-time equivalent members of staff, leading to savings of around £4 million. However, the majority of benefits from the Programme will not be delivered until it is completed including the Agency's estimate of £5 million a year from headcount reductions. We found that the Agency had taken a reasonable approach to modelling and forecasting these staff cost savings.

9 The Programme has made tangible progress in addressing some of the key challenges which the Department has faced in managing animal disease:

- **The Programme is improving the ICT within the Agency.** The Agency has implemented a system to help it plan and manage its work and its contact with customers, as well as an automatic system for tracing infected animals. These changes are improving the way the Agency works and reducing its reliance on legacy ICT.
- **The Agency's data quality is improving and the new ICT is enabling staff to share data across offices.** In 2008, the Agency carried out a data cleansing exercise, reducing the number of customer records from 440,000 to 155,000 and improving the quality and consistency of the Agency's information on customers. This information is now available electronically to Agency staff.
- **More efficient ways of working and service improvements have been introduced.** One example is the Agency's new automated process for tracking the movement of cattle testing positive for bovine tuberculosis. Despite reducing the number of staff working on the process from 43 to 28, the number of tracings carried out in a year increased by 24 per cent.

- **The Agency is starting to generate better information on costs and performance.** This is helping the Agency to understand the value of its services and should also support a more risk-based approach to the inspections of farms. The Department, in responding to the report of the Farming Regulation Task Force, has also committed to coordinating inspections between its arm's-length bodies, where appropriate. The National Audit Office is planning to examine the Department's progress in rationalising inspections across its bodies in a future report to Parliament.
- 10 The Programme is in line with the government's ICT Strategy.** The Agency has developed its technology to comply with the Department's technical standards and solutions. The new ICT system could therefore integrate with other systems across the Department and its arm's-length bodies, allowing them to share information electronically.
- 11 There have been issues with the implementation of the Programme:**
- **The Programme is currently two years behind its original schedule, in part due to necessary changes to the scope of the ICT.** The original plan was to complete the Programme by 2011-12 but the Agency is currently implementing the sixth of eight releases which make up the Programme. It is forecasting that the Programme will not be completed before 2013-14. We found that optimism bias in the original plans and an insufficient understanding of how to deliver transformative change contributed to these problems.
 - **There were issues with release six of the Programme.** The new ICT supporting the Agency's management of bovine tuberculosis went live three months later than planned in October 2011, and the Agency immediately faced some issues. This release was the most ambitious part of the Programme. Among other things, it was intended to enable private vets to submit test results online to the Agency, although only 11 of 497 practices signed up to this were online in October 2011. The Agency had to recruit temporary staff to deal with the resulting backlog of work, limiting its savings from headcount reductions in the short term. The Agency expects that half of the test results will be submitted online by August 2012.
 - **Relationships with customers and staff have been affected.** Problems with the ICT affected services to farmers and some received inaccurate or incomplete paperwork on testing their animals or experienced delays to the export of cattle. Agency staff, where morale was already low due to significant changes in the Agency, including a merger, office closures and redundancies, have also had to adapt to using the new ICT and experienced problems when release six went live.

12 The final stages of the Programme are critical to delivering the anticipated benefits:

- **Many of the benefits of the new ICT will not be delivered until the Programme is completed.** The final releases of the Programme will deliver much of the new ICT's planned benefits. This includes the Agency having access to a single new ICT system so that it can manage both emergency and day-to-day activities for all types of animal disease in one place.
- **The Agency remains reliant on risky legacy ICT.** The Agency has turned off only a few legacy systems so far and its emergency response operations remain critically reliant on ICT which does not link into other information systems. The resilience of these systems and their capability to recover in an emergency are of concern.

13 There is not an approved budget to complete the Programme. Delays to the Programme and an increase in the ICT scope mean that the Agency has not fully delivered the Programme within the expected funding period. The Agency has spent £103 million of the agreed budget of £123 million, although as funding is allocated on an annual basis, the Agency does not have approved funding for the Programme beyond March 2013.

14 The Agency relies on local authorities to provide key services, which are now at risk from local spending cuts. A key risk to the delivery of animal health and welfare services is the financial resilience of local authorities and their ability to carry out enforcement activities and respond to disease outbreaks. The Department is working with the Local Government Association and local authorities to mitigate this risk.

15 The Programme cannot by itself address all the challenges faced by the Department. We found examples of where the Agency is critically dependent on other organisations, but does not have sufficient control to introduce coordinated change. For example, although the Agency has developed common standards for the data it uses, it cannot control data standards or the quality of information coming from external sources.

16 The Department has recognised the need for closer working across the whole delivery landscape, joining up systems and establishing common data standards. The Department is taking a number of steps to achieve this. It established the Animal Health and Welfare Board for England in November 2011, which is developing guiding principles on animal health and welfare policy and its delivery in England, building on the 2004 strategy for animal health and welfare in Great Britain. The Department has also set up the Defra Network Chief Information Officer Board, which is developing common systems and data standards across the Department's arm's-length bodies, which are essential for sharing data and streamlining processes.

Conclusion on value for money

17 The Programme only has the potential to deliver full value for money if it is carried through to completion. Notwithstanding the delays, driven by the need to re-scope the ICT and recent technical issues, we think that this Business Reform Programme has been strongly managed in the last few years, and the potential to deliver value for money appears realistic if funding is continued.

Recommendations

18 We make the following recommendations:

- a** **The Department should continue to fund the Agency to complete the Programme, although it should be clear on what it expects from the Agency as a condition for doing so.** The Agency does not have approved funding to complete the Programme beyond March 2013. If it does not complete the Programme, it will not realise significant benefits including access to a new single ICT system for managing animal disease both day-to-day or in an emergency on behalf of the Department.
- b** **The Agency should set clear priorities for what it plans to do, and by when, to secure funding to complete the Programme.** These priorities should include rectifying existing problems, completing the move to a new single ICT system and switching off legacy ICT systems, otherwise significant benefits will be lost. Continuing problems with the implementation of the new ICT have meant that the Agency has had to recruit temporary staff to deal with a backlog of work. In the short term this has reduced the potential cost savings from headcount reductions, and the Agency remains exposed to the risks of working on a number of different and ageing ICT systems.
- c** **The Agency should build on recent activity to improve its relationship with customers, private vets and staff following issues with release six, to ensure that they engage in and support the completion of the Programme.** This should include responding to and acting on feedback from its customers, staff and private vets following recent engagement. The Agency's relationship with stakeholders, particularly farmers, was damaged for a short period by the problems in implementing release six. Agency staff, where morale had already been affected by other significant changes, including the merger, office closures and the introduction of new ways of working, had also experienced problems with the new ICT.

- d** **The Department's Animal Health and Welfare Board for England should publish its guiding principles on delivering animal health and welfare policy in England by the end of 2012.** The Department and the devolved administrations published the animal health and welfare strategy for Great Britain in 2004, with a vision for the next ten years. However, it needs reviewing to bring it in line with significant developments in the animal health and welfare delivery landscape over recent years. These include changes within the Agency and the implementation of the Programme.
- e** **The Department should draw on the improving cost and performance information being generated by the Agency's new ICT to inform its own activities.** This information should help the Department, for example, to develop a performance measurement framework for the delivery of animal health and welfare services, at least across its own arm's-length bodies. The new information should also support the Agency in a more risk-based approach to farm inspections. In the past, the Agency has had limited access to good quality information.
- f** **The Department, through the Defra Network Chief Information Officer Board, should ensure that it maximises efficiencies from better data quality and the faster sharing of data.** The Department's arm's-length bodies do not use the same ICT or share data standards, meaning there is no consistency across the delivery landscape, leading to inefficient ways of working. The Defra Network CIO Board, of which the Agency is a member, is working collaboratively to address this by developing a joint approach, in line with the government's ICT Strategy.

Part One

The challenges of managing animal disease

1.1 This part sets out the strategic challenges of managing animal disease. It outlines the steps taken by the Department for Environment, Food and Rural Affairs (the Department) to address these challenges. A key response has been the implementation of the Business Reform Programme (the Programme) within its Agency, the Animal Health and Veterinary Laboratories Agency (the Agency). The Programme is the focus of this report.

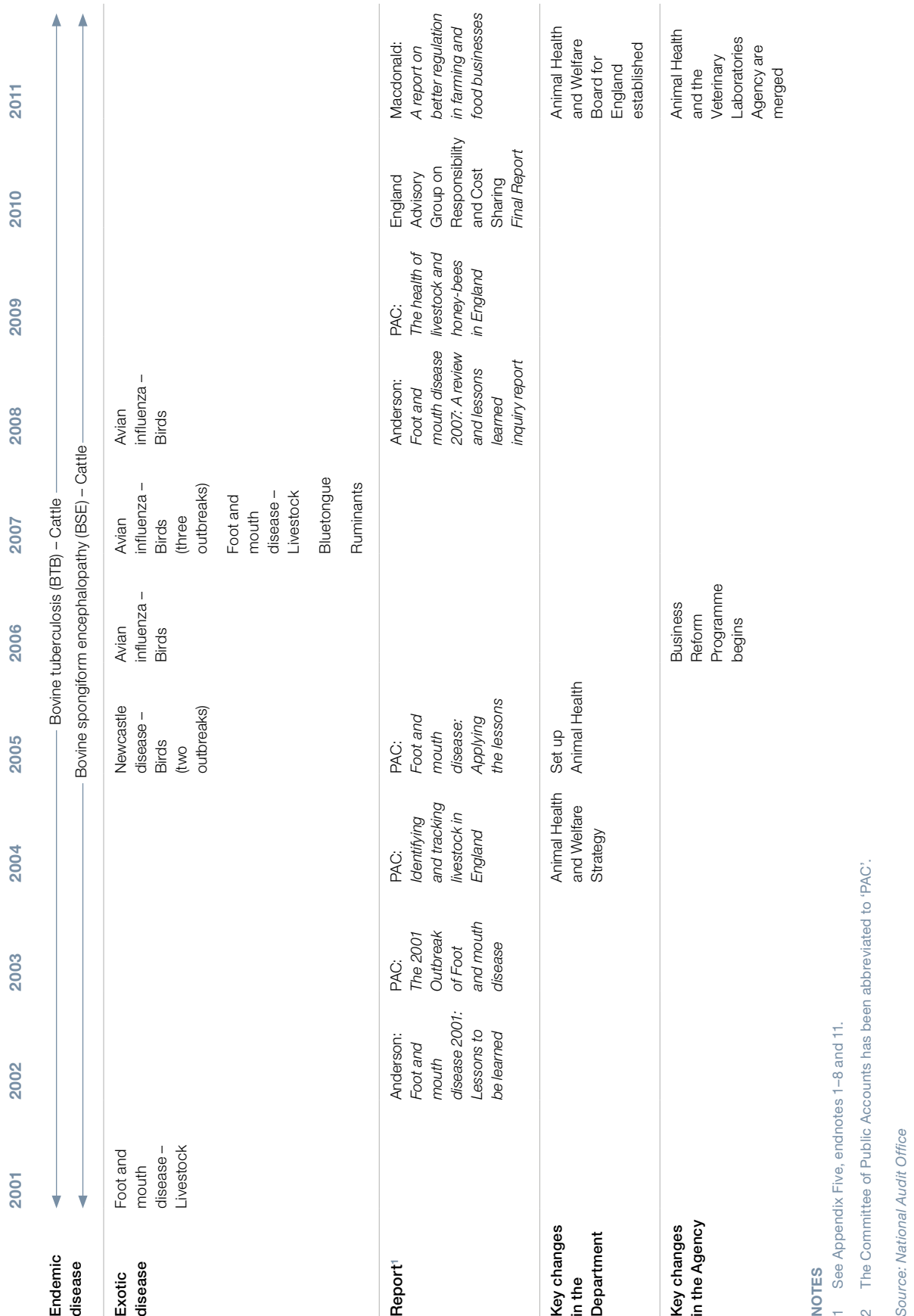
The risks of animal disease

1.2 Animal disease is on the National Risk Register, overseen by the Cabinet Office, and severe outbreaks have significant economic, social and environmental impacts. The 2001 foot and mouth disease outbreak cost the government an estimated £3 billion and the farming industry, tourism and the rural economy an estimated £5 billion.

1.3 Notifiable animal diseases, which must be reported to the police or the Agency, can be 'endemic' or 'exotic'. Endemic diseases, such as bovine tuberculosis, are present in kept or wild animal populations and require day-to-day management. This includes testing animals for disease, tracing infected animals and enforcing restrictions on farms affected by disease. Exotic diseases, such as avian influenza, are not normally present in this country. They can be unpredictable and may need an emergency response from the government at any time. On average there is a suspected disease outbreak each week and each disease affects different species and requires a different government response.

1.4 Since 2001, there have been ten significant exotic disease outbreaks in Great Britain as shown in **Figure 1** overleaf. The Agency has also dealt with many endemic diseases over the same period notably bovine tuberculosis, on which the Agency spends the majority of its budget, and BSE, where there is significant intervention even though there are now very few cases. At the time of this report Schmallenberg was the latest emerging disease and has been reported by around 260 farms in England. It is unknown what the impact of this disease will be and the Department is monitoring the situation.

Figure 1
Disease outbreaks and reports on managing animal health and welfare



NOTES

- 1 See Appendix Five, endnotes 1–8 and 11.
- 2 The Committee of Public Accounts has been abbreviated to 'PAC'.

Source: National Audit Office

The need for improved systems, information and processes

1.5 To mitigate the risks of animal disease, the Department sets policy to prevent and manage outbreaks of disease; support the farming industry; protect the welfare of animals; and safeguard public health. The key body responsible for delivering the Department's policy is the Agency. Local authorities and private veterinarians, among others, also play a key role in delivering services. Appendix Four sets out the roles and responsibilities of the various organisations in more detail.

1.6 Following the foot and mouth disease outbreak in 2001, it was clear that the systems and processes in place at that time were not adequate to deal with such a situation. In recent years, the Department has also faced growing industry, economic and regulatory challenges. The Committee of Public Accounts and the Anderson reports on the farming industry (Figure 1) between 2003 and 2009, and the more recent report of the Farming Regulation Task Force in 2011, have made numerous recommendations to the Department on addressing the challenges it faced. These included the need for the Department to:

- **Improve Information and Communications Technology (ICT)** ICT systems in the past were often developed piecemeal to deal with specific diseases and species. This meant that those systems designed to manage one disease were not capable of supporting work in another, even if much of the required data was the same. Some systems to manage animal disease outbreaks were also technically obsolete, in some cases, more than 20 years old and therefore at a high risk of failure. Furthermore, systems used during disease outbreaks were not the same as those used for business-as-usual activities. As major outbreaks can take place many years apart (Figure 1) staff were often not familiar with working on the systems used in emergency situations.
- **Improve data quality and sharing** Data held on the location and movement of animals were often poor quality, not comprehensive, and difficult to share, access or analyse. Information on the location and movement of animals is critical in an emergency response to prevent the spread of disease. Obtaining a single view of disease risks, for example, of individual farms, was almost impossible as data held in different systems, even if referring to the same premises, could be held in different technical formats.
- **Better understand costs and performance** The Department has not been able to easily measure the full cost or performance of animal health and welfare services, especially where more than one of its bodies undertook the work, or where bodies outside the Department such as local authorities or the private sector were involved in delivery.¹ Without this information the Department could not make fully informed decisions to manage its resources or measure the effectiveness of its services.

¹ Comptroller and Auditor General, *Defra Financial Management Report 2011*, Session 2010-12, HC 1593, National Audit Office, November 2011, and National Audit Office, *Commentary on cost data provided by the Department for Environment, Food and Rural Affairs to the Advisory Group on Responsibility and Cost Sharing*, (October 2010).

- **Introduce more efficient ways of working** For many years manual processes were in place to manage animal disease. These processes varied between offices and it was difficult to share work between different locations. To address weaknesses in core ICT systems, manual ‘workaround’ systems were often developed, which led to costly duplication of effort and further undermined the quality of data available.
- **Reduce the burden of inspection** **Figure 2** shows how the roles and responsibilities of the various bodies delivering animal health services overlap, with information sometimes held in multiple unconnected systems. This has led to farmers and slaughterhouses often being subject to multiple inspections, which is inefficient and can cause confusion.

The challenge of reducing costs

1.7 As outlined above, the Department faces a number of challenges to improve its systems, information and processes and while delivering these improvements has had to reduce its overall spending. The Department, its arm’s-length bodies and the devolved administrations in Scotland and Wales spent £390 million on animal health and welfare in 2005-06. Since then, their spending has fallen year-on-year to £285 million in 2011-12, a reduction of 27 per cent (**Figure 3**). Following the 2010 Spending Review, the Department indicated that it was likely to cut spending on animal health and welfare by a further 18 per cent between 2011-12 and 2014-15 to £233 million. This represents a total reduction in spending of 40 per cent between 2005-06 and 2014-15. These figures do not include spending by local authorities on animal health and welfare activities.

Figure 2

A number of bodies carry out the same activities

	Animal Health and Veterinary Laboratories Agency	Environment Agency	Food Standards Agency	Rural Payments Agency	Local authorities	Industry bodies
Registration of animals or land	X			X		
Identification and tracking of animals				X	X	X
Inspection of premises e.g. farms, markets and slaughterhouses	X	X	X	X	X	X

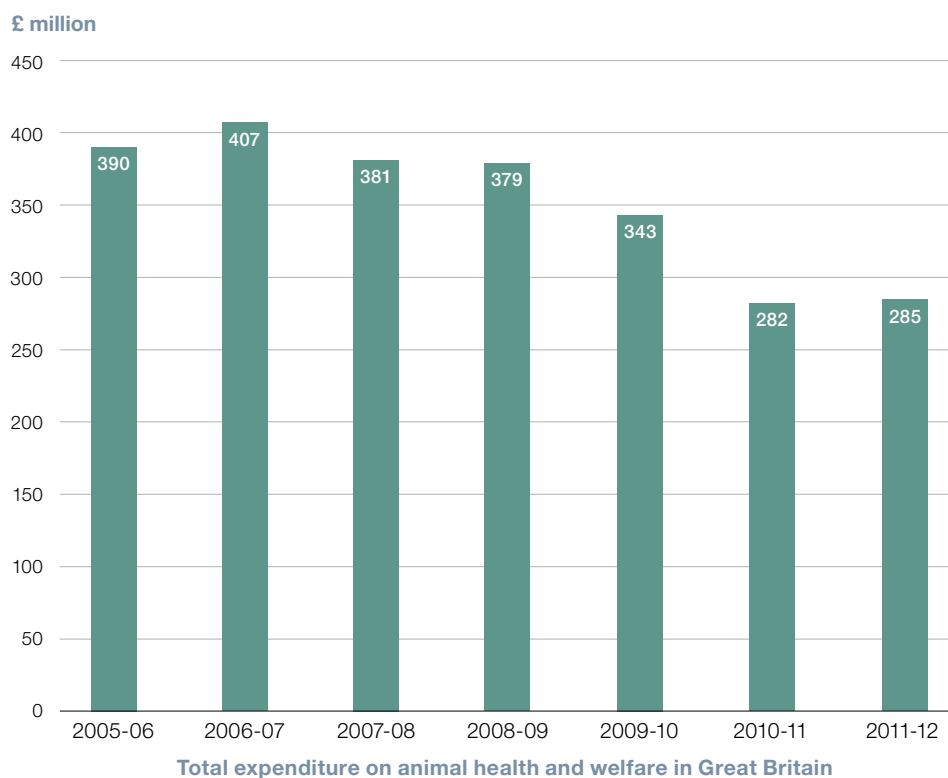
NOTE

1 This illustrates the overlapping responsibilities of a selection of delivery bodies.

Source: National Audit Office

Figure 3

Between 2005-06 and 2011-12 spending on animal health and welfare fell from £390 million to £285 million, a reduction of 27 per cent

**NOTES**

- 1 Figures show expenditure in England, Scotland and Wales on animal health and welfare, excluding capital.
- 2 All figures are in cash terms.

Source: National Audit Office analysis of departmental financial information

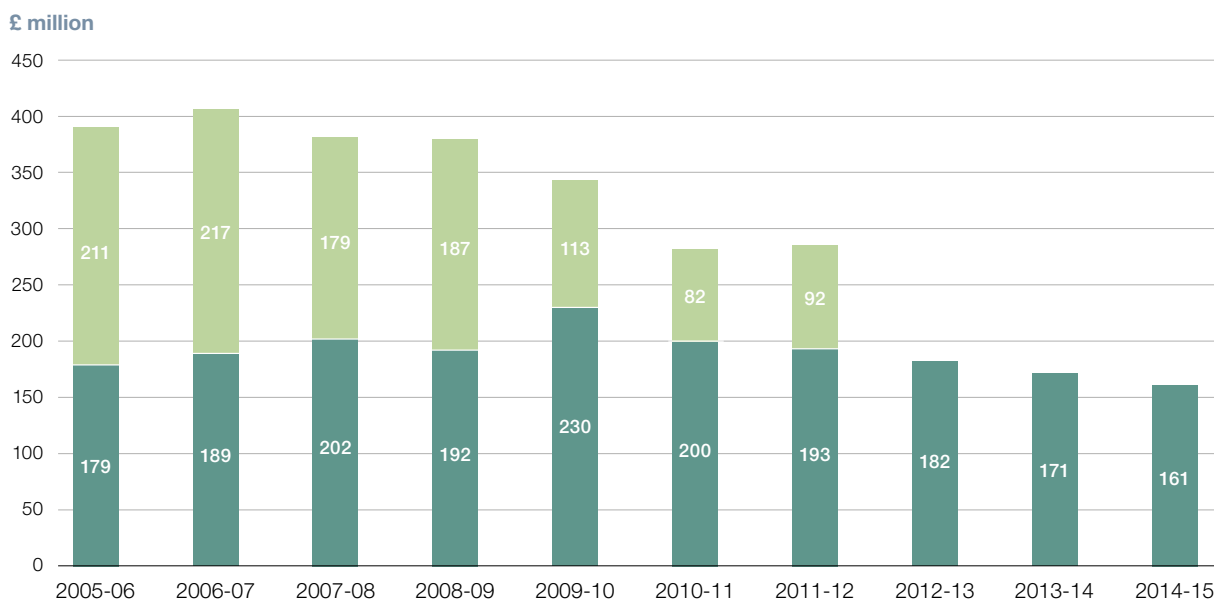
The Department's response to the challenges

1.8 The Department has recognised these challenges and taken steps to address them. A key response, and the focus of this report, is the Agency's Business Reform Programme. This ICT-enabled change programme will implement new systems and processes within the Agency to help improve the efficiency and effectiveness of delivering animal health and welfare services. The Agency began the Programme in 2006 and is likely to complete it in 2013-14.

1.9 Since its creation as a new arm’s-length body in 2005 (as Animal Health), the Department has increasingly concentrated expenditure on animal health and welfare in the Agency. In 2005-06, the Agency received 46 per cent of animal health and welfare funding (£179 million) and by 2011-12 this had increased to 68 per cent (£193 million). The actual amount of funding the Agency receives has decreased since 2009-10 and will continue to fall through to 2014-15 (**Figure 4**). The ways in which the Programme can support cost reduction in the Agency will therefore become increasingly important.

1.10 The Department has also transferred additional areas of responsibility into the Agency over this period, such as the Egg Marketing Inspectorate and Dairy Hygiene Inspectorate in April 2007, and merged it with the Veterinary Laboratories Agency in April 2011. The merger combined scientific and operational services to improve the surveillance of animal disease as well as transferring part of the Department’s policy role to the Agency. These changes show the increasing importance of the Agency to the Department in delivering animal health and welfare services.

Figure 4
Since 2005-06, animal health and welfare expenditure has been concentrated on the Agency



■ Government expenditure in Great Britain outside of the Animal Health and Veterinary Laboratories Agency

■ Expenditure allocated to the Animal Health and Veterinary Laboratories Agency

NOTES

- 1 Agency expenditure prior to 1 April 2011 is calculated as the sum of both Animal Health and the Veterinary Laboratories Agency expenditure.
- 2 Figures for 2012-13 to 2014-15 from AHVLA Corporate and Business Plan 2012 to 2015.
- 3 All figures are in cash terms.

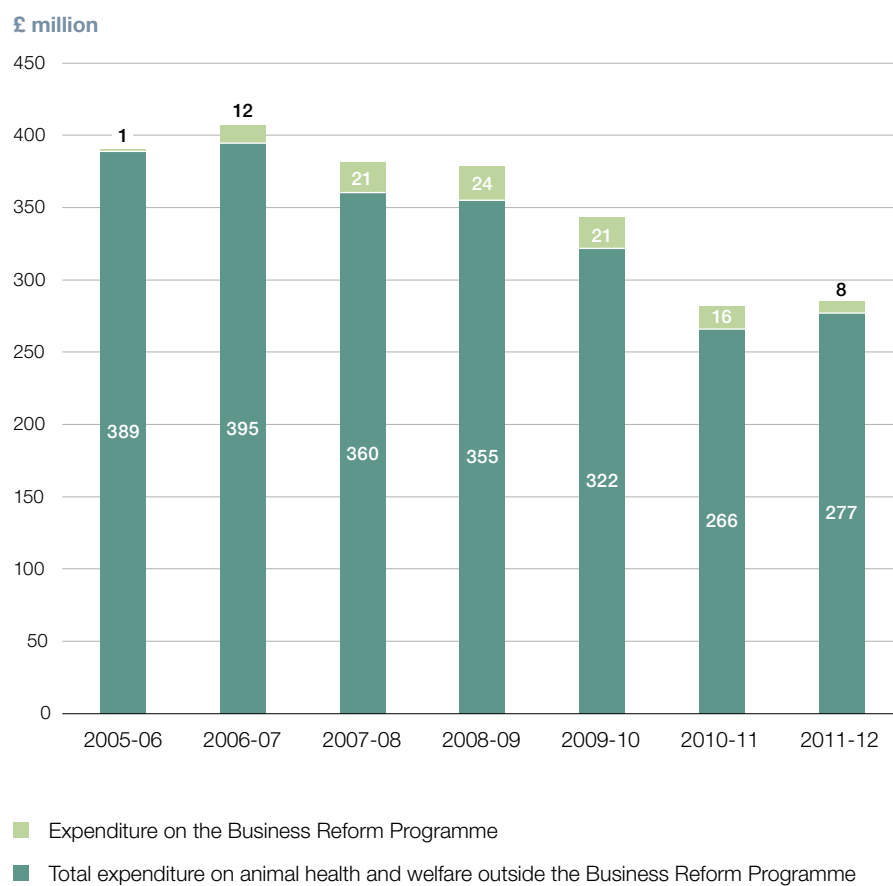
Source: National Audit Office analysis of departmental and Agency financial information

The scope of the Business Reform Programme

1.11 Between 2005-06 and 2011-12 total spending by the Department, its arm's-length bodies and the devolved administrations on animal health and welfare was more than £2 billion. Of this amount, the Agency spent £103 million on delivering the Programme, which is 4 per cent of the total spending on animal health and welfare over the last seven years (**Figure 5**).

Figure 5

Between 2005-06 and 2011-12 the Agency spent £103 million on delivering the Programme



NOTES

- 1 All figures are in cash terms.
- 2 Total expenditure by the Department, its arm's-length bodies and the devolved administrations.

Source: National Audit Office analysis of financial information provided by the Agency and the Department

1.12 Figure 6 outlines the scope of the Programme. It shows that the Programme is a key element of the Department's response to the recommendations made by the Committee of Public Accounts and is the reason why it is the focus of this report. As Figure 6 also shows, even if the Programme is completed successfully it will only improve operations within the Agency and will have little or no effect on organisations outside of the Agency's control. For example, the Agency, although improving the quality of its own data, will have no control over the quality of data it receives on animal movements from local authorities. This may compromise its ability to identify and contain the spread of disease.

The wider Departmental response

1.13 The wider Departmental response to these challenges includes these examples:

- The Department published the first Animal Health and Welfare Strategy for Great Britain in 2004. The strategy outlined the Department's aims to work with stakeholders, understand costs and benefits, streamline roles and responsibilities, and provide and enforce effective welfare standards.
- The Department established the Animal Health and Welfare Board for England in 2011. The board forms part of the Department's decision-making process, bringing together independent people, with relevant knowledge and skills, and senior government officials. It is the principal source of departmental advice to Ministers on all strategic animal health and welfare matters in England. The board plans to publish its guiding principles on the delivery of animal health and welfare policy in England by the end of 2012 and is currently consulting on this.
- The Department established the Defra Network CIO board in 2010. This board has developed a joint ICT strategy for the Department and its arm's-length bodies to bring the overall approach in line with the government's ICT strategy.
- In its response to the report of the Farming Regulation Task Force² in February 2012, the Department committed to work with its arm's-length bodies to combine inspections and other site visits. This illustrates its intention to reduce the burden of inspection on farmers and others involved in the farming industry.

2 See Appendix Five, endnote 8.

Figure 6 Scope of the Business Reform Programme

Challenges	How the Programme will change the Agency	Outside the scope of the Programme
Improve ICT	<p>Multiple systems replaced by a single, multi-functional system. The system could integrate with other systems in the Department and its arm's-length bodies to share information electronically.</p> <p>Reliance on legacy systems reduced, with a number of systems being replaced by modern, more reliable technology. Critical legacy systems switched off.</p> <p>Same system for both day-to-day and emergency activities for all types of animal disease.</p>	<p>Integration with systems outside the Department and its arm's-length bodies.</p>
Improve data quality and sharing	<p>Single system holding customer information, with data collected in standard format.</p> <p>Comprehensive data standards applied within the Agency so data are consistent, comparable and good quality.</p> <p>All Agency locations will have access to the data on the new system and work can be moved between offices electronically.</p> <p>Opportunity to improve the quality of data on bovine tuberculosis.</p>	<p>Control or quality assurance over collection and standardisation of data collected outside of the Agency.</p> <p>Establishing data standards outside of the Agency.</p> <p>Interface between the new system and the systems of local authorities.</p>
Understand costs and performance	<p>Enhanced management information on costs of individual activities and service performance available.</p>	<p>Information on costs and performance of activities outside of the Agency.</p>
Introduce more efficient ways of working	<p>Key processes standardised and automated, creating a better audit trail and providing wider access to information.</p>	<p>Processes outside of the Agency.</p>
Reduce the burden of inspection	<p>A single system for holding customer information in one place.</p> <p>Better oversight of activities carried out by Agency staff and private vets.</p>	<p>Customer information outside of the Agency.</p> <p>Limited oversight of the roles and responsibilities of other organisations.</p>

Source: National Audit Office analysis of Agency business cases for the Business Reform Programme and interviews with key stakeholders

Our approach

1.14 This report examines the Agency's progress in implementing the Business Reform Programme. This is part of a series of National Audit Office publications examining how government is managing ICT-enabled change in reforming public services (Appendix Three). The report covers:

- The Agency's approach to the Programme (Part Two).
- An assessment of the Programme (Part Three).

1.15 We have focused on the Programme as the Department and the Agency's key operational response to the challenges of delivering animal health and welfare services.

1.16 Our full methodology is at Appendix One.

Part Two

The Agency and its approach to the Programme

2.1 In this part we examine the role and responsibilities of the Animal Health and Veterinary Laboratories Agency (the Agency), and its approach to implementing the Business Reform Programme (the Programme).

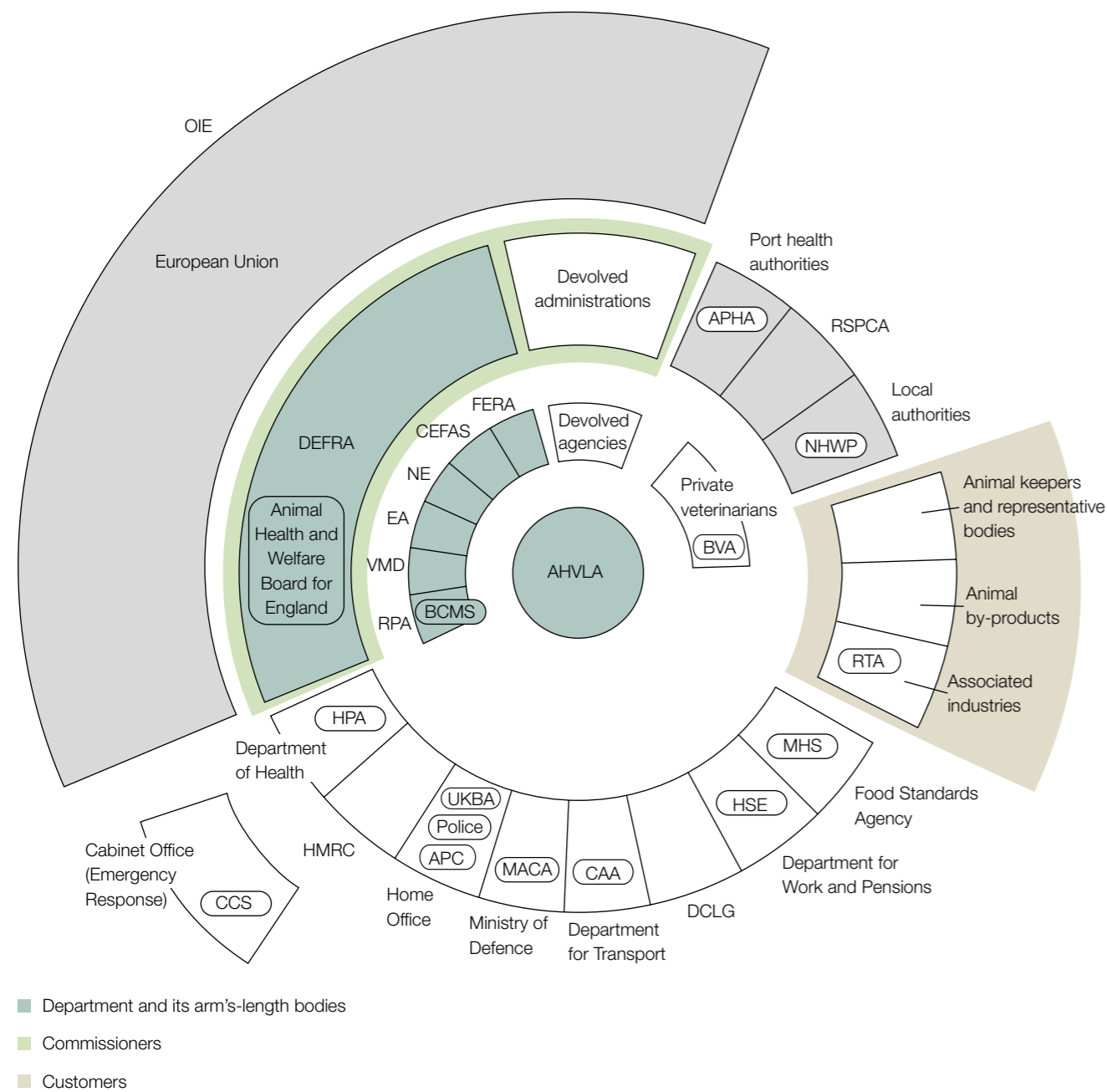
The Agency's position in the delivery landscape

2.2 The Agency plays a central role in leading the response to disease outbreaks, but is not solely responsible. The Department for Environment, Food and Rural Affairs (the Department) and the devolved administrations separately commission the Agency to deliver their animal health and welfare policies. The Agency manages outbreaks of disease, carries out welfare visits to farms and markets, and advises farmers and other customers on disease prevention, animal imports and exports and welfare in transport.

2.3 To deliver these activities, the Agency works alongside a number of other organisations, including: six of the Department's arm's-length bodies; 18 other central government departments and arm's-length bodies; and more than 150 local authorities in England (**Figure 7** on pages 22 and 23). This figure shows that only a small number of organisations involved in delivering animal health and welfare services are under the control of the Department. Appendix four sets out the roles and responsibilities of these organisations in more detail.

2.4 Outside the Department, organisations such as the Health Protection Agency and the Army are significantly involved in delivering services during an emergency situation. Others, such as the Food Standards Agency, which is responsible for inspecting slaughterhouses, have a role in delivering day-to-day activities. The Agency's customers are farmers and others in the farming industry including abattoirs, hauliers, exporters and livestock auctioneers. The full roles and responsibilities of those featured in the delivery landscape are described in Appendix Four.

Figure 7
The delivery landscape



Key

- APC – Animal Procedures Committee
- AHVLA – Animal Health and Veterinary Laboratories Agency
- APHA – Association of Port Health Authorities
- BCMS – British Cattle Movement Service
- BVA – British Veterinary Association
- CAA – Civil Aviation Authority
- CCS – Civil Contingencies Secretariat
- CEFAAS – Centre for Environment, Fisheries and Aquaculture Science
- DCLG – Department for Communities and Local Government
- DEFRA – Department for Environment, Food and Rural Affairs
- EA – Environment Agency
- FERA – Food and Environment Research Agency
- HMRC – HM Revenue & Customs
- HPA – Health Protection Agency
- HSE – Health and Safety Executive
- MHS – Meat Hygiene Service
- MACA – Military Assistance to Civilian Authority
- NE – Natural England
- NFU – National Farmers Union
- NHWP – National Health and Welfare Panel
- OIE – World Organisation for Animal Health
- RPA – Rural Payments Agency
- RTA – Red Tractor Assurance
- UKBA – UK Border Agency
- VMD – Veterinary Medicines Directorate

Source: National Audit Office

Control of the landscape

2.5 In an emergency, the Department's Chief Veterinary Officer takes control of the response, working in conjunction with the Department's policy Director and the Chief Executive of the Agency, and operational responsibilities are clear. To test its response, the Department carries out national contingency exercises in line with standards set by the EU. The last one, in 2010, involved the Agency as well as the devolved administrations, local authorities, the police, the Health Protection Agency and vets. The government reported that the exercise had shown that it could effectively deal with an outbreak. It also recognised the need to improve its preparations focusing on internal communications, ICT connectivity, data sharing and resource planning. This suggests that the same challenges for the Department we identified in Part One remained relevant.

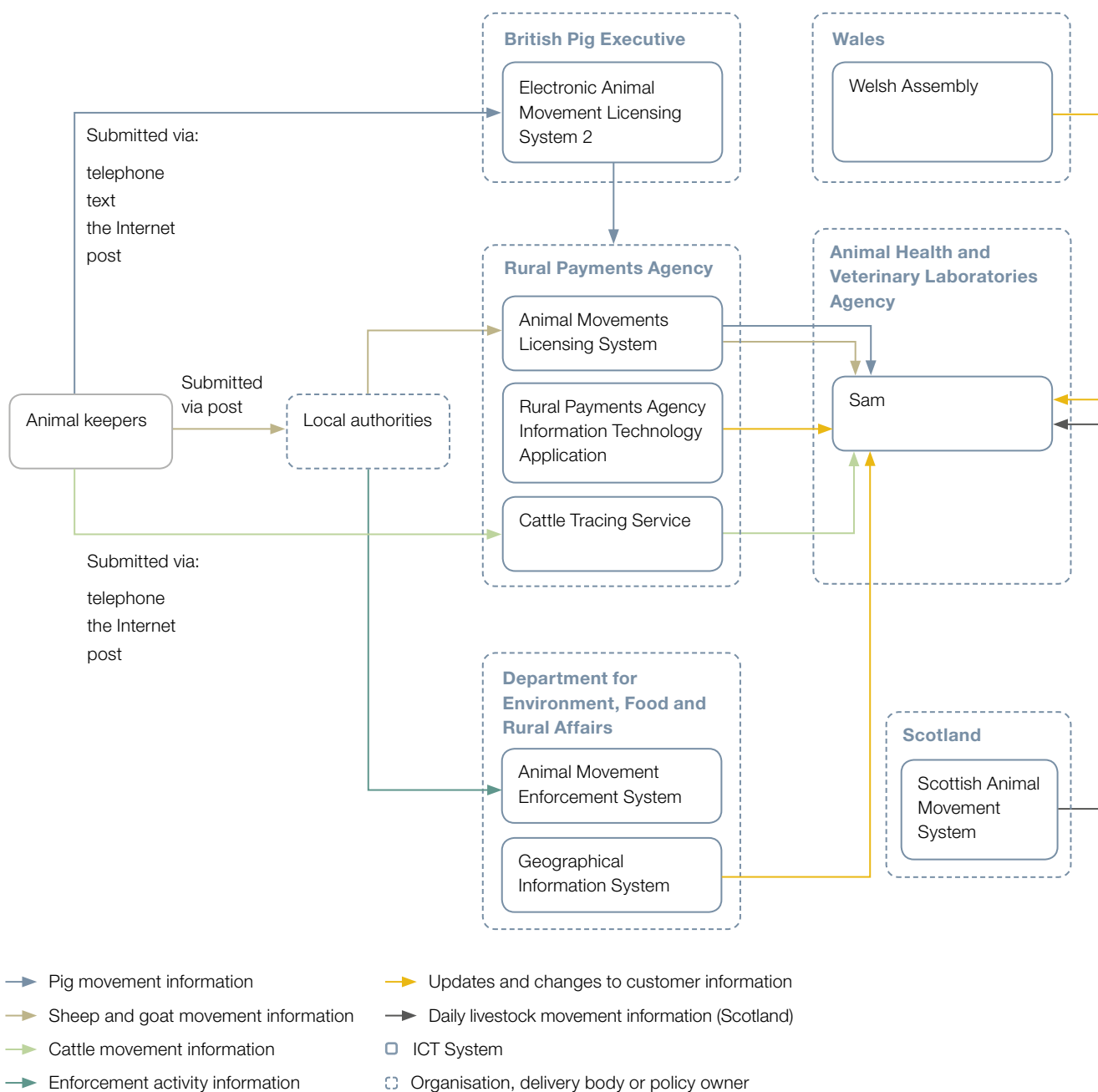
2.6 On a day-to-day basis, the Agency has few levers to influence how organisations work together or how they prioritise their resources. Local authorities, for example, in addition to providing critical resources in the event of a disease outbreak, such as enforcing movement restrictions, are also responsible for investigating local welfare issues and issuing export certificates. The Agency has a framework agreement in place with local authorities which outlines the level and types of activity they are expected to carry out. The financial resilience of these authorities to deliver services is a key risk given local government funding cuts. However the Department is aware of this risk and is working with local authorities, and the Local Government Association to mitigate it. The Department is also in the process of tendering for an electronic sheep movement database, which would remove the responsibility for receiving information about sheep and goat movements from local authorities. The new system should be in place during 2013-14.

2.7 To assess the readiness of local authorities to respond to an emergency situation, the Department carries out a capability self-assessment every six months. At the time of this report, the majority of local authorities indicated that they were well placed to deal with an outbreak but the Department has no assurance over the accuracy of these assessments. To mitigate this, a programme of visits to local authorities to look at the arrangements they have in place is being developed by the Agency. The intention will be to provide advice and support and share best practice. If local authorities are not well placed to deal with an emergency, the cost of managing this risk will fall to the Department.

2.8 **Figure 8** provides a further example of the Agency's critical dependence on others. Data on the movement of cattle, pigs and sheep come from eight different systems, hosted by the Department, the Rural Payments Agency, the devolved administrations and the British Pig Executive (BPEX), which represents the pig industry. Farmers and local authorities provide information to these bodies via post, telephone, text or the Internet which is then entered onto the various systems. There are no consistent data standards or quality controls across these organisations, meaning that the Agency does not have any assurance that the movement information supplied is complete, accurate or consistent. We were shown entries into the pig movement database which were incomplete, either lacking the original location of the animal or the unique identification number, which would make it difficult for the Agency to trace these animals in the event of an emergency.

The pig movement database has been introduced relatively recently and the Department is providing additional support to deal with the sorts of problems that can occur with new systems. It is also using the lessons learned from the pig movement database to help with the development of the new sheep and goat database.

Figure 8
Sources of data for the Agency



NOTE

1 'Sam' is the name of the new ICT developed by the Business Reform Programme.

The Agency's approach to changing its operations

2.9 The Agency's operations are shown in **Figure 9** on pages 28 and 29. It focuses on six services:

- controlling animal imports and exports;
- leading the response to exotic disease outbreaks;
- safeguarding animal health and welfare;
- managing endemic disease;
- protecting the food chain through inspections; and
- veterinary research and consultancy.

2.10 The Agency operates from 29 offices in England, including its head office in Worcester. It maintains a wide range of communication channels for its customers, including telephone and face-to-face visits. The Programme will incrementally streamline the Agency's 16 business processes and implement a new ICT system, called Sam, to be used by staff and private vets, who play an important role in providing services to farmers.

2.11 Through the Programme, the Agency is moving towards a more interactive online relationship with private vets, meaning that vets will be able to submit the results of animal disease tests online, directly into the Agency's ICT system. This is a significant development in the way in which the Agency manages its relationship with private vets and is a key component of the benefits the Programme is anticipated to deliver. The Agency has contracted IBM to develop, deliver and maintain the new ICT. Throughout the Programme, a small project team has been in place at the Agency to manage the relationship with IBM and ensure the Programme is going to plan.

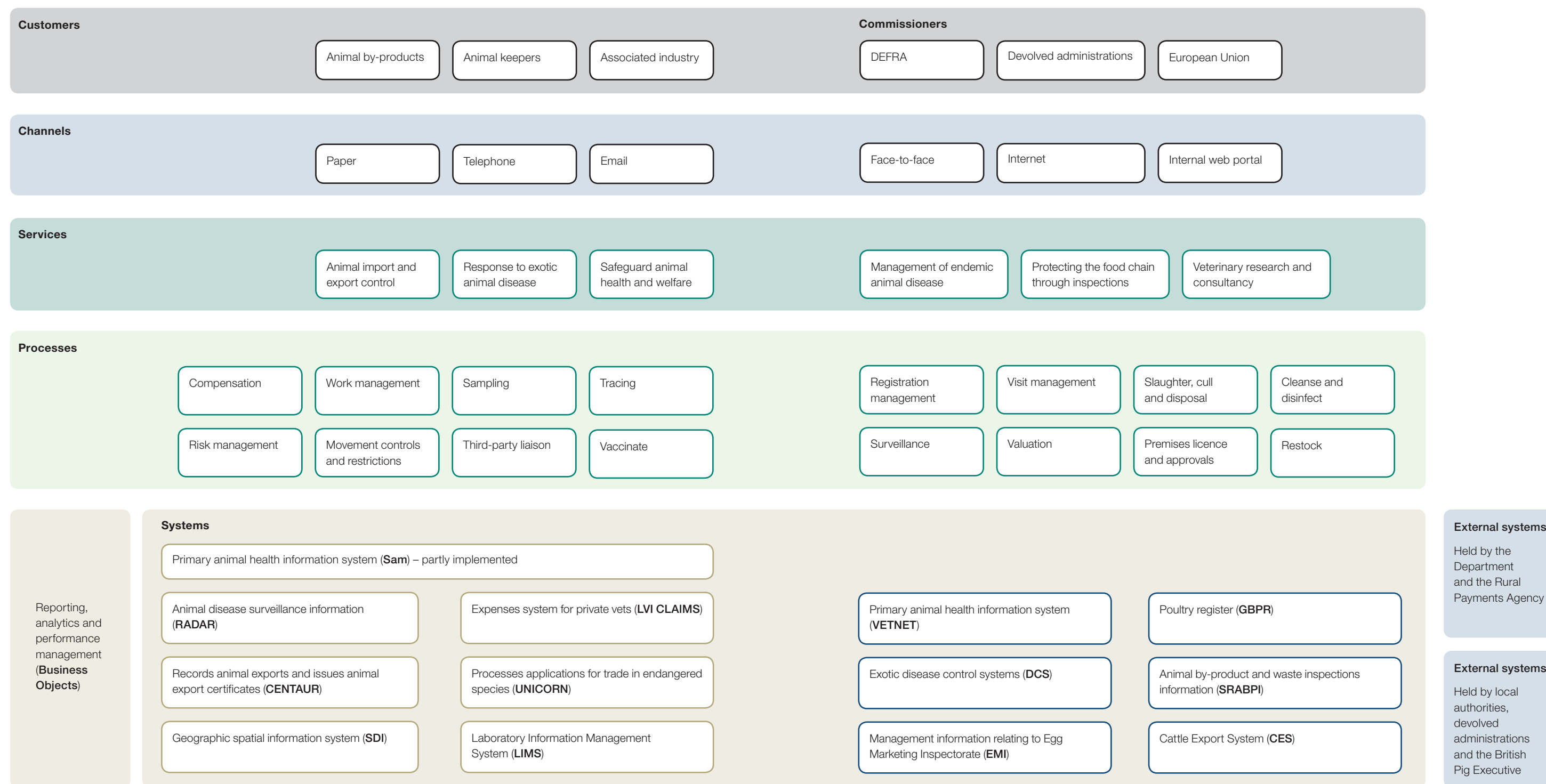
2.12 The Agency planned an incremental approach, implementing change in eight releases rather than all in one go as a 'big bang' approach as shown in **Figure 10** on pages 30 and 31. This was a realistic approach given the need for the Agency to balance resources between implementing a substantial change programme, while delivering day-to-day activities and maintaining readiness for an emergency at all times. On average, there is a suspected disease outbreak each week.

2.13 At the time of this report, the Agency had implemented six of the eight releases. The Agency had:

- cleansed its customer records, identifying incomplete, incorrect, inaccurate, and irrelevant data. This exercise reduced the number of customer records from 440,000 to 155,000, and improved the quality of the Agency's information on customers (release one);
- completed a new customer contact database (release two);
- introduced a document and records management system (release three);
- implemented a work management system (release four);
- implemented an improved process for tracing animals infected with bovine tuberculosis using the new ICT (release five); and
- switched on ICT designed to modernise working practices and improve efficiency in managing the risks of bovine tuberculosis and allow private vets to submit test results online (release six).

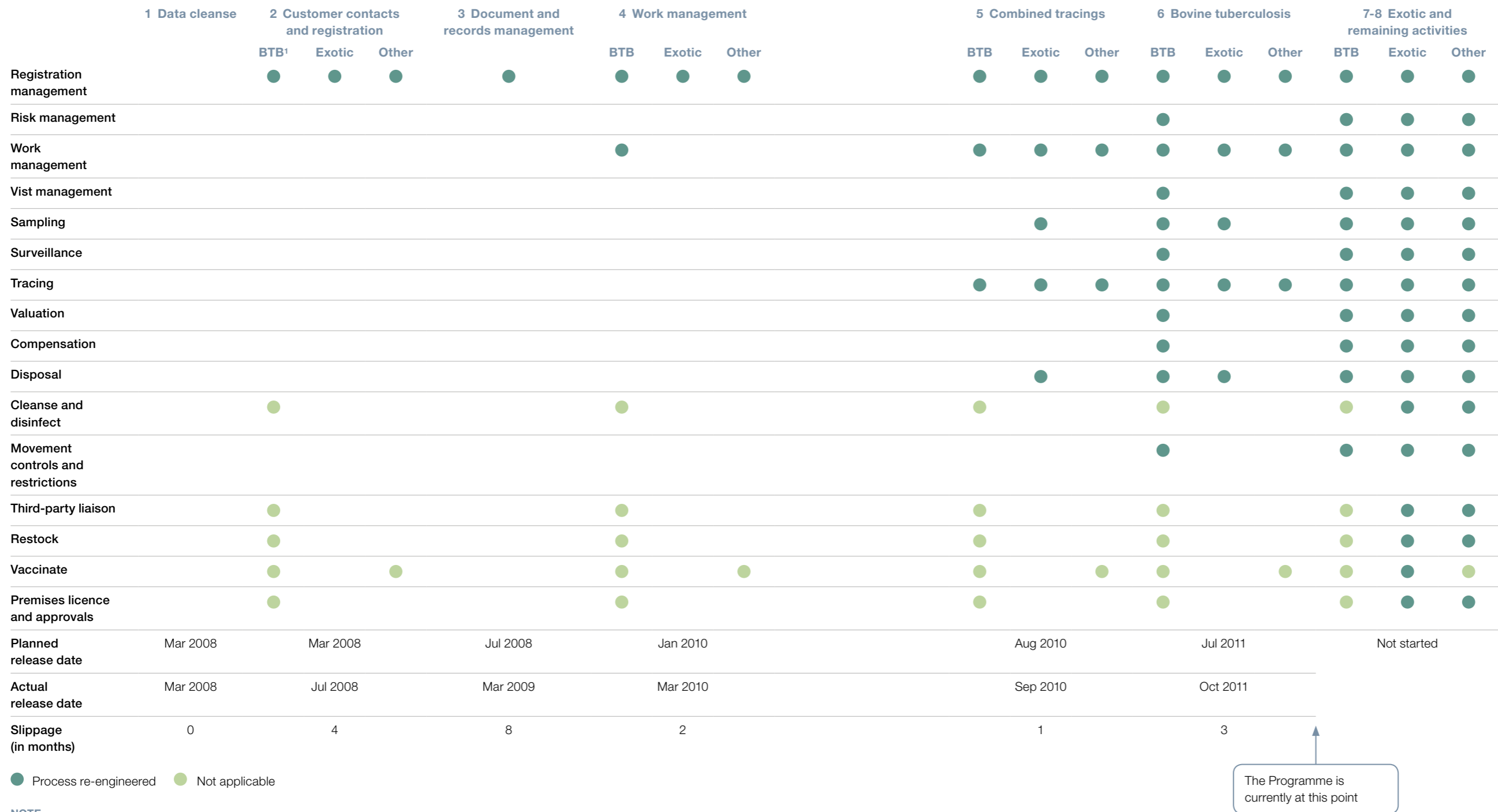
2.14 As Figure 10 shows, release six went live in October 2011, three months later than planned and it is not yet working as anticipated. We examine the issues around this release further in Part Three. The Agency had originally planned to implement the Programme in full by March 2011, but it is now two years behind schedule, as most of the releases, including release six, were delivered later than planned (Figure 10). The Programme will not be completed before 2013-14 now, and the Agency is still determining the scope of the final releases. These will predominantly deal with the management of exotic disease outbreaks and will deliver much of the overall benefit of the system.

Figure 9
The Agency's operations in April 2012



□ Legacy system to be decommissioned on completion of the programme

Figure 10
Schedule of incremental approach to implementing the Programme



NOTE
1 BTB = Bovine tuberculosis

Source: National Audit Office

The costs of the Programme

2.15 The original business case for the Programme in 2007 estimated that the cost of the Programme would be £107 million. The Agency bid for an increased budget of £123 million in June 2009 due to re-planning and an increase in the ICT scope. The original plan, for example, had not included the development of software to enable the Agency to electronically allocate and manage the workload of its staff between its offices. As well as the change in scope, the re-planning may suggest that there was a degree of optimism bias in the initial planning assumptions.

2.16 As shown in **Figure 11**, the Agency had spent £103 million on the Programme by the end of 2011-12. The budget for the Programme included the costs of implementation as well as the ongoing costs of supporting the Programme. At least £67 million (65 per cent) of spend on the Programme was paid to IBM and its subcontractors for the development and maintenance of the new system.

2.17 Figure 11 shows that spend on the Programme to the end of 2011-12 and the forecast final cost of £117 million will be within the approved budget of £123 million. However, as the Programme is two years behind schedule, due to the delays in its implementation and enhancements to its scope, the Agency is in the process of re-scoping the final releases. As the Agency has not delivered the Programme within the expected funding period, any requirements for further annual funding will be subject to the Department's normal funding approvals process.

Figure 11
Spending on the Programme is within budget (£m)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
	-06	-07	-08	-09	-10	-11	-12	-13	-14	-15	
Budget 2007	0	12	21	29	23	13	3	3	3	0	107
Additional Budget	0	0	1	-4	1	8	8	-1	0	3	16
Budget 2009	0	12	22	25	23	21	11	2	3	3	121
Actual spend to 31 March 2012	1	12	21	24	21	16	8	0	0	0	103
Committed spend to 31 March 2013								8			8
Forecast to complete ¹	-	-	-	-	-	-	-	0	3	3	6

NOTE

¹ Total may not correspond to sum of yearly figures owing to rounding.

Source: National Audit Office analysis of Agency financial information

Part Three

An assessment of the Business Reform Programme

3.1 In this part we assess the Animal Health and Veterinary Laboratories Agency (the Agency) implementation of the Business Reform Programme (the Programme). We also report on the benefits achieved to date.

Operations assessment

3.2 We used an analytical framework to assess the impact the Agency's changes are making across its whole operation to date. We examined the impact of the Programme on:

- the Agency's strategy and business model;
- the effectiveness of the Programme's governance, architecture and data standards;
- implementation of the new ICT into the Agency;
- the support to staff and private vets to use the new processes and ICT;
- the Agency's skills and capabilities to operate in new ways;
- the extent of business process improvement; and
- the choices made about technology solutions.

3.3 More detail on the seven areas of operational performance we examined is provided at Appendix Two.

Strategy and business model

3.4 The Agency has a clear strategy for the Programme to deliver efficient and consistent operations, better management information and an improved service to its customers. It is doing this by developing a new operating model supported by modern and reliable ICT. The Programme has remained flexible enough to support the Agency in developing a revised operating model following the merger of Animal Health with the Veterinary Laboratories Agency in April 2011. At the same time it became a net running cost agency. This means that instead of receiving an annual budget to provide services, the Agency will be paid for the activities it carries out for the Department for Environment, Food and Rural Affairs (the Department) and devolved administrations. Increased cost and performance information generated by the new ICT will support the Agency in this change.

3.5 The Programme continues to enable the Agency to meet wider departmental and government objectives such as better regulation, responsibility and cost sharing and the provision of a joined-up customer experience. The Programme is also aligned in part to the government's 2011 ICT Strategy. For example, a single, core system in the Agency could integrate with other systems across the Department and its arm's-length bodies.

Governance, architecture and data standards

3.6 Changes to the management team have improved the governance of the Programme and the Agency has regularly challenged and developed its plan. This is illustrated by the update to the original business case in June 2009 and the approval of a £16 million increase in the Programme's budget to £123 million. From 2008-09 onwards there was more comprehensive information available on the costs of the Programme, indicating that the new management team had improved financial control over the Programme.

3.7 Good business and technical governance is in place throughout the Programme and our interviews and review of Programme Board papers found that the Agency's Programme Board reviews the Programme monthly, focuses on risks and is chaired by the Agency's Chief Executive Officer who is the Programme's senior responsible owner. The Agency and the Department's Chief Information Officers meet suppliers and information stakeholders fortnightly to make technical decisions about the design of the system and the management team remains committed to, and well informed about, the Programme. This commitment was reinforced by the Chief Executive Officer when giving evidence at the Environment, Food and Rural Affairs Committee in February 2012.³

3.8 The Agency has worked with the Department on its technology development, complying with their technical standards and solutions. This could deliver benefits beyond the Agency's Programme, as the technology produced can be reused by the Department or its other arm's-length bodies. However, it is likely that the Agency could have developed its technology solutions at less cost if it had not been required to comply with the Department's standards.

3 See Appendix Five, endnote 9.

3.9 The Agency's Chief Information Officer participates in the Defra Network CIO Board which has developed a joint strategy for the Department and its arm's-length bodies to bring the overall approach in line with the 2011 Government ICT Strategy. As we have previously reported, this strategy involves developing common approaches to data standards and reducing dependency on legacy systems.⁴ These developments, and a more collaborative departmental approach, compare well with the position set out in our report on the Department's Geographic Information Strategy.⁵ This report found that the Department's governance arrangements had not been able to support and drive it and its arm's-length bodies towards a common geographic information approach.

3.10 The Agency has well-defined data standards based on Department or government standards where possible. Formal governance and change control arrangements are in place for the Agency's data model, which sets out the definitions, formats and structure of the data required to support the Agency's business. IBM is responsible for maintaining the model.

Implementation

3.11 The senior responsible officer for the Programme is the Chief Executive of the Agency. Within the Agency, the Programme management office is staffed by an integrated business and technical team, all with clear roles. The Programme management office applies recognised project management disciplines.

3.12 The Programme is two years behind schedule and is unlikely to be completed before 2013-14. As Figure 10 showed, release six went live later than planned in October 2011 and is taking longer than expected to work as required. As half of the Agency's annual spending is allocated to dealing with bovine tuberculosis, this release was critical to the Agency's day-to-day business. The Agency had anticipated that this would be the most challenging release of the Programme, as this was the point at which private vets were to be given access to the new ICT so that they could submit bovine tuberculosis test results online. The problems with release six also had a short-term impact on customer service as the Agency:

- could not certify animals clear of bovine tuberculosis for export, leading to short delays to farmers exporting high value cattle and calves in autumn 2011; and
- had to deal with increased administration as some farmers and private vets received inaccurate and incomplete paperwork.

⁴ See Appendix Five, endnote 14.

⁵ See Appendix Five, endnote 12.

3.13 IBM and the Agency identified inadequate testing contributed to a significant part of the problems with release six. A representative sample of real data was not used and testing not undertaken over a realistic period of time. IBM was responsible for the system testing and the Agency for the user acceptance testing. Furthermore, there were issues with data migration routines on go live, which were also IBM's responsibility. The Agency's Chief Executive has stated that the problems with the release should not have happened and that resolving them was a priority.⁶ Fortunately, the Agency had negotiated a fixed-price contract for release six which transferred risk to IBM. The significant cost of fixing defects has therefore fallen to IBM. The Agency and IBM have learned lessons and have improved testing and preparation for future releases. The Agency intends to negotiate fixed-price contracts for these releases.

Service management

3.14 Shortly after release six went live, we analysed staff feedback on the new ICT and visited offices in Worcester, Cardiff and Preston to speak to staff. They were positive about the move away from paper-based manual processes and the new flexibility to work from the office, home or any remote location. Managers were positive about being able to plan and move work between people and locations and monitor individual performance. Staff were less satisfied with the performance of release six of the system, perceiving it as slow, unreliable and difficult to navigate at that time. In recent months, the Agency has improved its internal communications so that Agency staff using the new ICT can share their experiences.

3.15 As a result of the problems with release six, only 11 (2 per cent) of the 497 private veterinary practices which signed up to use the new ICT were submitting test results online in October 2011. Given the problems, the Agency had to stop its roll-out of the new ICT to these private vets, and those vets not yet using Sam continue to submit test results by post. The Agency identified the incompatibility of the new system with the private vets' ICT as a particular difficulty and did not conduct sufficient analysis of the technology these vets were using before the roll-out started. The Agency now intends to complete the roll-out of the new ICT to private vets, with additional support, so that half of the bovine tuberculosis test results will be submitted online by August 2012, almost a year later than intended.

3.16 The fact that 497 private veterinary practices (76 per cent of the total number of practices working with the Agency) have signed up to use the new ICT does, however, suggest there is clear support for the new ways of working. The Agency is in the process of developing formal contracts with vets. This should help it to mandate the digital submission of all test results in the future and increase take-up of the new ICT.

3.17 Alongside the Programme, the Agency is also merging the former Animal Health and former Veterinary Laboratories Agency's support functions. This should help to improve quality of service and reduce the costs of supporting the new ICT. No decision has yet been made about IBM's role in providing this support.

6 See Appendix Five, endnote 9.

People

3.18 As a result of the Programme and other changes in the Agency, its staff face new ways of working and the prospect of redundancies and office closures. Over the past two years staff engagement scores, as measured by the Civil Service People Survey, have fallen. Employee engagement is defined as how proud employees are of their organisations and whether they would recommend it as a great place to work. The 2011 survey found that the Agency had an engagement score of 46 per cent, compared with 51 per cent in 2010. This compared to 56 per cent, on average, in the rest of the civil service in both years.

3.19 The management team has recognised the challenges of delivering significant cultural change within a specialist scientific and technical workforce, and the need to engage staff in reforming the business more widely. A new director was appointed in summer 2011 to focus on managing change and communications in, and outside of, the Agency. A number of initiatives are now under way including a customer insight group, with specialists from across the Agency, to re-engage with customers and understand customers' views. The Agency's customer insight research in spring 2012 found that overall user satisfaction with the Agency remained high and unchanged since its survey in 2009. This suggests that issues with release six when it went live have not had a lasting effect on customer satisfaction.

3.20 While the Agency has been reducing its reliance on interim staff (**Figure 12** overleaf), it recognises there are capability gaps in its current workforce. It is introducing learning and development activities to strengthen staff skills, specifically in programme and project management, and commercial management.

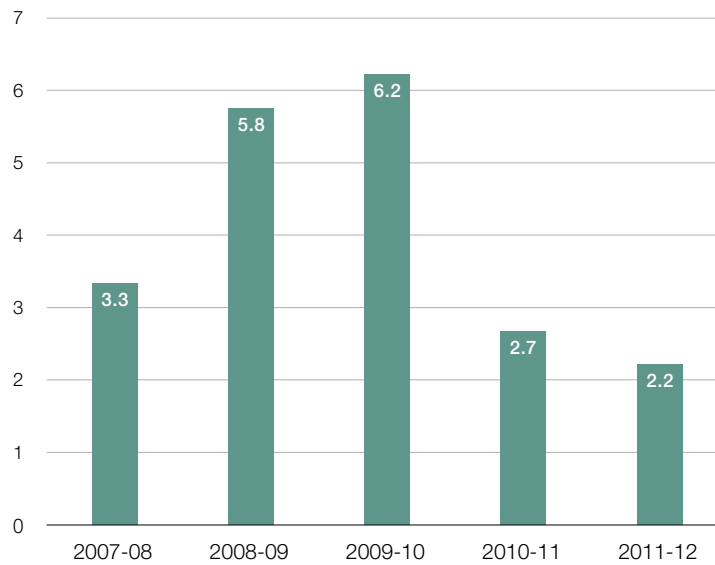
Processes

3.21 The Agency has 16 business processes (Figure 9), which it is gradually standardising and automating by introducing the new ICT. Even though so many processes are changing, we found they remain clearly defined, documents are up to date and members of staff understand their responsibilities. The changes are removing a significant volume of paper records and enabling workload to be shared between offices. For example, new broiler chicken registration, introduced in 2010, was concentrated in two offices that had spare capacity. Previously, each of the Agency's offices would have carried this out for local customers, requiring more staff training and taking longer.

Figure 12

Between 2007-08 and 2011-12, the Agency has reduced its cost and reliance on interim staff

Annual cost to the Agency of interim staff (£m)



Source: National Audit Office analysis of Agency financial information

3.22 Since September 2010, staff have used the new ICT to track the movement of cattle testing positive for bovine tuberculosis, to prevent the disease spreading. This new automated process is a good example of the efficiencies being made:

- In the past, this work was carried out in separate locations and took six days. It is now carried out centrally by one specialist service centre in Cardiff and takes one day.
- The number of full-time equivalent staff involved has reduced from 43 to 28 and these staff have developed specialist skills and knowledge in the tracing process. They are therefore able to offer a higher quality of service to customers.
- In the year to September 2010, 283,000 animals were traced. In the year to September 2011, the unit in Cardiff traced 350,000 animals – an increase of 24 per cent over the previous year with a smaller workforce.

Technology

3.23 The chosen technology is appropriate for the Agency's business needs. A cheaper solution may have been feasible if less customisation had been required. However, the Agency depends on data from systems held by the Department, particularly in the Rural Payments Agency (Figure 8). The lack of common data and technology standards means that the Agency has needed to customise key applications to communicate with these unique external systems. It is this which has led to increased complexity in the Agency's technology, rather than being the result of gold-plated business requirements. It is these inefficiencies that the Department's Network CIO Board is seeking to reduce.

3.24 The Agency remains reliant on legacy systems, although this reliance is reducing with each release. Customer information, including that on farmers and their livestock as well as the Agency's management of bovine tuberculosis is now on the new system. However, the detail of the management of welfare cases is still on a legacy system called Vetnet. The Agency's arrangements for the resilience of key systems and their capability to recover from a disaster are of concern. We found the resilience of legacy systems depends on standby equipment and there are no plans to respond to a broader incident affecting the central data centre that IBM manages. While the Department does not have formal disaster recovery provision in place for any IBM-managed applications, we found the Agency has arrangements in place to stage a recovery. This disaster recovery provision, service level requirements and business criticality have been subject to review by the Department's Group ICT and Contingency Planning teams.

3.25 While the Department has strategic responsibility for security and information assurance, the Agency takes sensible steps to assess and manage information security risk. We found that there were appropriate policies, governance arrangements and risk management processes alongside a good level of staff education and awareness within the Agency.

The realisation of Programme benefits

3.26 The Programme was examined by the Cabinet Office in summer 2010 as part of its review of all ICT projects costing more than £100 million. The review concluded that the Programme would continue to deliver a positive return on investment and should be continued. This is in line with the Agency's analysis in its business case produced in February 2011, which examined the value of completing the final two releases of the Programme. This concluded that the Programme should be completed in order to realise the value of the investment.

3.27 We examined the impact of the Programme on the Agency's operations.

Figure 13 shows our analysis of the key progress the Agency has made in addressing the challenges around ICT, data and processes to support the Department's management of the risks of animal disease.

3.28 The forecast quantitative benefits from the Programme included reducing Agency headcount, savings from decommissioning legacy ICT and the Agency's improved ability to charge for its services. We found a dedicated team of three people tracking the realisation of benefits, which are reported monthly to the senior responsible owner and the Agency's board. By the end of 2011-12, the Agency had realised more than half the total of forecast headcount reductions.

Figure 13

Key benefits to date

Challenge	Key benefits
Improve ICT	New ICT system supports management of bovine tuberculosis
Improve data quality and sharing	Customer data records cleansed Customer contact database in place
Improve costs and performance management	Data available to Department to measure total cost of bovine tuberculosis control in England and number of cattle herds free of bovine tuberculosis
Reduce burden of inspection	Customer data being migrated from legacy ICT to new ICT Improved 'single view of customer', helping it to plan and manage activities e.g. targeting inspections at higher-risk premises, reducing the burden on farmers
Introduce more efficient ways of working	Document and records management system in place Standard processes such as for tracing cattle infected with bovine tuberculosis Specialist service centres for tracing infected animals and exporting livestock

Source: National Audit Office analysis of Agency business cases, and interview data obtained from key Agency staff

3.29 The original business case in 2007 committed the Agency to reducing headcount by 158 full-time equivalent staff by 2011-12. An update to the business case in 2009 changed this figure to 142 but increased the overall forecast of headcount reduction to 220 staff by 2013-14. Despite delays to the Programme, at the end of 2011-12 we found that 194 permanent staff had been released from the Agency. However, the technical problems with release six led to the Agency recruiting 75 temporary staff to enter the backlog of bovine tuberculosis tests manually, as private vets could not submit test results online. This meant that at the end of 2011-12, an actual reduction of 119 full-time equivalent staff had been achieved (**Figure 14**).

3.30 At 31 March 2012, the Agency has saved around £4 million from these headcount reductions, £0.7 million less than planned due to paying temporary staff. The Agency is planning to release these temporary staff by April 2013, bringing the total forecast headcount reduction to 214 by the end of the Programme, which is within six of the original plan. The Agency has estimated that this will allow it to save £5 million a year. We found that the Agency had taken a reasonable approach to modelling and forecasting these staff cost savings. However, the Agency achieving the estimated savings depends on it completing the Programme successfully.

Figure 14

At the end of 2011-12, the Agency had reduced headcount by 119 full-time equivalent staff, against a planned total of 142



NOTES

- 1 Actual staff reduction is staff released less additional staff recruited.
- 2 Forecast staff reduction shown for 2012-13 and 2013-14.

Source: National Audit Office analysis of Agency headcount information from 2009 to 2012

Appendix One

Methodology

The main fieldwork was conducted in November and December 2011. Facts and figures are up to date as at 31 March 2012.

Method	Purpose
<p>Literature review</p> <p>We reviewed a variety of reports, including those of the Committee of Public Accounts.</p>	<p>To understand the context for animal health and welfare services, and areas where recommendations have previously been made.</p>
<p>Analytical framework (Appendix Two)</p> <p>We applied our analytical framework to the Business Reform Programme, gathering evidence through interviews with senior and operational Agency staff and contractors; a review of strategic and operational documents; and quantitative analyses of the Agency's financial information.</p>	<p>To understand and evaluate the operational and financial performance of the programme.</p>
<p>Interviews</p> <p>We conducted interviews with senior policy, operational and finance staff within the Department and the Animal Health and Welfare Board for England.</p>	<p>To understand the Department's approach to animal health and welfare, current challenges in delivering services and the changes under way in the delivery chain.</p>
<p>Document review</p> <p>We reviewed a variety of papers from the Department covering key issues regarding animal health and the future of policy.</p>	<p>To understand the Department's current and future policy direction.</p>
<p>Site visits</p> <p>We visited the Agency's offices in Worcester, Cardiff and Preston as well as a local authority and a private veterinary practice.</p>	<p>To understand front-line delivery.</p>
<p>Financial and quantitative data analysis</p>	<p>To understand trends in the Department's spend on animal health and welfare, and the future implications of spending cuts.</p>

Appendix Two

Our analytical framework for the Programme

Area of operational performance	Good practice outcomes
1 Strategy and business model	
Strategy	
Strategy	The strategy for the Programme is regularly updated to reflect changes in the business environment and to exploit new technologies.
Support and commitment	Senior management actively support the strategy and inspire organisation-wide support.
Strategic governance	Senior management provide strong and effective oversight, challenge and direction; and actively manage corporate risks.
Business case and funding	
Business case	Business case regularly challenged, opportunities exploited and managed risks taken. Strong benefits realisation approach is in place and implemented.
Fully understood costs	Costs are optimised to ensure that value of investments are fully exploited.
Agreed and sustainable funding	Funding mechanism established to ensure programme sustained over its full life cycle.
2 Governance, architecture and standards	
Governance	
Business governance	Appropriate governance arrangements are in place to ensure business relevance as the services are developed.
Technical governance	Appropriate governance arrangements are in place so that the services and technical architecture are maintained and enforced.
Roles and responsibilities	Key stakeholders understand the value of their role, are empowered to perform it, and have the necessary skills and experience.

2 Governance, architecture and standards *continued*

Enterprise architecture

Service enterprise architecture	A clear service enterprise architecture is in place for the Programme and integrated into the wider organisation.
Technical architecture	Business strategy, enterprise architecture and ICT architectures developed together. Enterprise and technical architectures jointly owned by business and ICT.
Information strategy	A clear and consistent strategy for data architecture ensures data are managed effectively with clear understanding where and when data are captured within business processes.

Standards

Structure rules and definitions	Technical information and data standards are shared and agreed across the organisation and stakeholders. Data change control procedures are in place.
Data quality and assurance	Business users trust data received. A coordinated approach is in place to improve data quality. Responsibility for data quality is shared with key stakeholders.
Legislative	Senior management understands and is accountable for compliance with relevant legislation.

3 Implementation

Implementation approach

Methodology	A formal development methodology has been adopted and applied.
Requirements and definitions	Stakeholders are engaged throughout the requirement and development process. Requirements are kept simple and not over-engineered.
Life cycle management	Testing processes are designed in partnership with business and the development team. Release management processes are in place across all environments.

Programme management

Programme management	Programme management reflects good practice and has clearly defined stages. A clear project plan exists managed according to good practice.
Intelligent customer (of implementation)	Mechanisms are in place for handling contract changes. The supplier has sufficient capability to meet the Programme's needs.
Risk management	Risks, issues and assumptions are known and actively managed. Risk appetite for the programmes is defined and managed and owned at board level.
Implementation capability	The right and sufficient capabilities are in place with an appropriate balance of programme and business change management and technical development skills.

3 Implementation *continued*

Business change management

Stakeholder management	Stakeholder communications are actively managed around stakeholder perceptions and commitment. Stakeholders are fully engaged in the change process at all levels.
Change management	There are clear and effective change management processes in place. An assessment was made on the readiness of the organisation and skills of key stakeholders to enable the change.

4 Service management

Service performance

Service definitions	There is a clear definition of services where users know the expected outputs, service levels and success criteria.
Service performance	Target performance metrics are regularly compared with actual performance and good practice benchmarks, with remedial actions being taken at the earliest opportunity.
Service level agreements	A structured SLA exists for each service or for each customer, designed according to good practice.

Intelligent customer (ongoing)

Retained function	The retained function has effective links with the user community and can get feedback and influence its engagement with the service.
Management of supplier services	There is a clear process for delivering the Programme with suppliers and partners, with clear points of contact and effective contract management.

5 People

Internal workforce

Staff capabilities	Staff have necessary skills and training for their roles with a defined and ongoing training programme.
Organisational design	The organisational structure is clearly defined and supports effective service delivery with responsibilities and accountabilities defined.
Workforce planning	A process ensures necessary capabilities and capacity are in place. A resource management plan exists for recruitment, retention, redeployment and redundancy of staff.

Supplier capabilities

Reliance	Reliance on external suppliers is understood and managed. The balance of internal and externally supplied roles is known and is appropriate.
Supplier capabilities	Supplier staff are skilled to perform their role.

5 People *continued*

Customer capabilities

Customer capabilities Consideration given to capabilities of end users. Clear training and support provided to address capability gaps and for roll-out of services.

Communications Feedback is regularly sought from end users to ensure they have the capabilities needed.

6 Process

Business processes

Process definition A standard set of business processes exist for each service, reflecting good practice. Process definitions include all customer, organisational and supplier activities.

Process improvement Processes continually streamlined to increase efficiency and maintain performance.

Technical processes

Data management processes Processes are clearly defined and documented. There are processes for resolving data issues with clear ownership and responsibilities. Process automation and workflow is used to improve efficiency.

Disaster recovery and BCP A clear process and strategy for data back-up/disaster recovery is in place. Business continuity plans are in place, regularly reviewed and tested.

Controls and ownership Controls are in place to audit and ensure traceability from source to use. Controls are supported by internal and external assurances.

Access management Access to data is appropriately controlled and monitored. Access, usage and integration of data are controlled through information governance.

Security processes

Systems System security actively managed with regular security reviews. Business actively governs system use and reviews compliance with legal requirements to address fraud and cyber-crime threats.

Buildings Physical locations used to deliver services have necessary security measures in place.

People Staff follow defined and enforced policies on security and data usage. Supplier staff vetted and cleared.

7 Technology

Applications

Applications	Applications are cost-effective. Applications are adapted to changes in the business environment and continually improved.
Application architecture	Application architecture is defined with, and owned by, business. Applications procured in line with application architecture.
Performance	Performance is regularly reviewed and improvements made.

Infrastructure

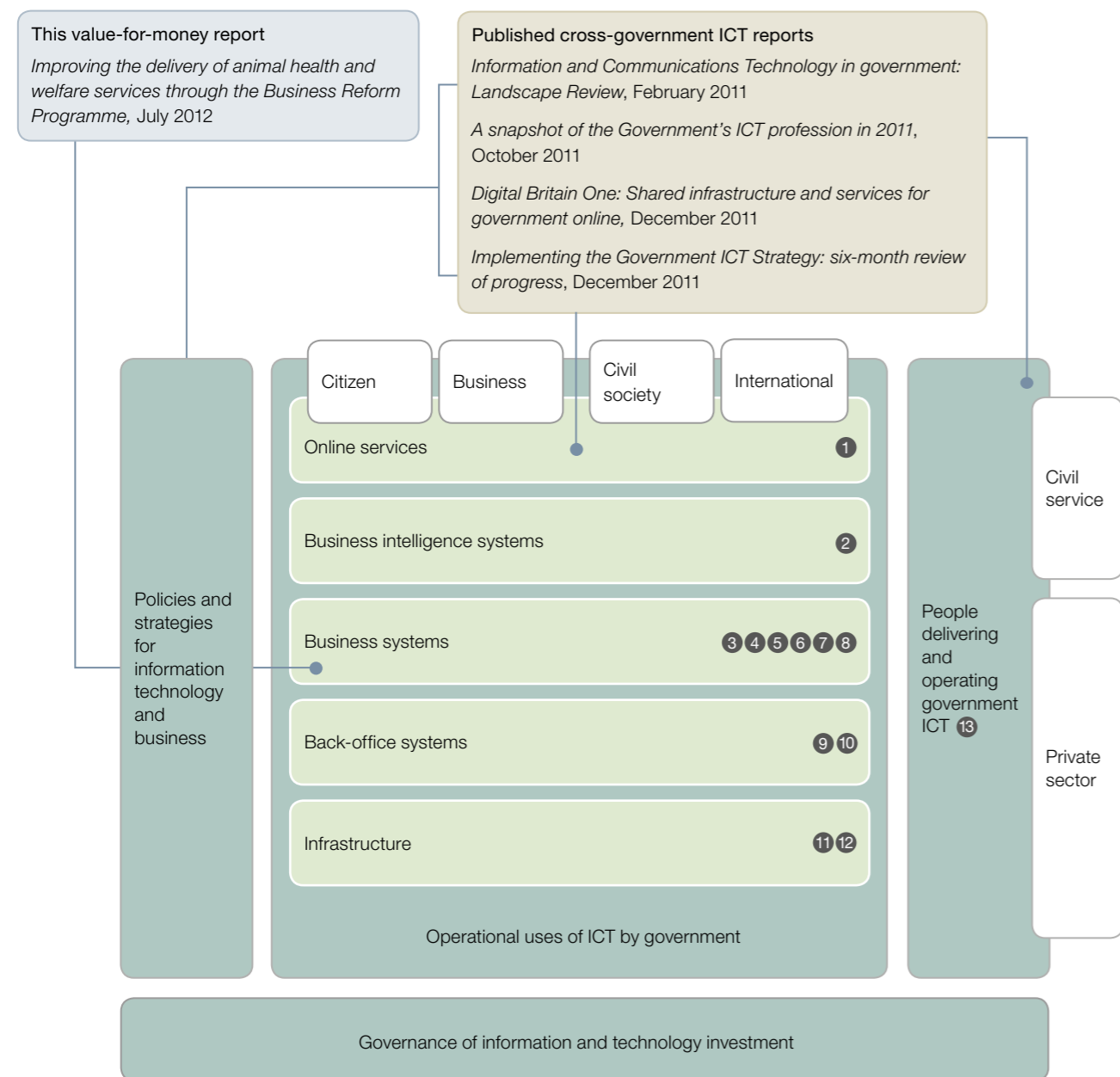
Scalable	Advanced technologies (e.g. cloud, virtualisation) are being adopted that allow flexible scaling and optimal utilisation of technologies.
Utilisation	The utilisation of technology considered and managed throughout its lifetime.

Legacy arrangements

Transition from legacy ICT	All legacy ICT identified and effective transition arrangements planned or delivered. All legacy data cleansed and mapped to new solution. All legacy decommissioning costs identified and considered.
Ongoing legacy ICT	The solution automatically integrates with remaining legacy ICT. Ongoing legacy ICT is cost effective and in line with good practice.

Appendix Three

National Audit Office reports on government ICT



Published client reports, focused on ICT

Online services

- 1 *HM Revenue & Customs: The expansion of online filing of tax returns*, November 2011.

Business intelligence systems

- 2 *Ministry of Defence: The use of information to manage the logistics supply chain*, March 2011.

Business systems

- 3 *The National programme for IT in the NHS: an update on the delivery of detailed care records systems*, May 2011.
- 4 *The failure of the FiReControl project*, July 2011.
- 5 *Crown Prosecution Service: the introduction of the streamlined process*, November 2011.
- 6 *The introduction of the Work Programme*, January 2012.
- 7 *Child Maintenance and Enforcement Commission: cost reduction*, February 2012.
- 8 *HM Revenue & Customs: The compliance and enforcement programme*, March 2012.

Back-office systems

- 9 *Shared services in the Research Councils*, October 2011.
- 10 *Efficiency and reform in government corporate functions through shared services centres*, March 2012.

Infrastructure

- 11 *Department for Environment, Food and Rural Affairs: Geographic information strategy*, July 2011.
- 12 *Mobile technology in policing*, January 2012.

People delivering and operating government ICT

- 13 *Adult apprenticeships*, February 2012.

NOTE

1 For published client reports focused on ICT see opposite page for a full list

Appendix Four

Roles and responsibilities

Organisation	Roles and responsibilities
World Organisation for Animal Health (OIE)	Intergovernmental organisation responsible for improving animal health worldwide.
European Union	
Animal Health and Welfare	Protects and raises the health status and condition of animals in the European Union.
Animal Health and Welfare Board for England	Provides policy advice to government on the health and welfare of kept animals in England.
Department for Environment, Food and Rural Affairs (DEFRA)	Holds policy responsibility for animal health and welfare in England.
Animal Health and Veterinary Laboratories Agency (AHVLA)	Responsible for the surveillance of, and managing, endemic disease, coordinating responses to exotic diseases, and veterinary research.
Centre for Environment, Fisheries and Aquaculture (CEFAS)	Conducts scientific research that supports the marine environment.
Environment Agency (EA)	Provides expert advice to the government, in particular on waste.
Food and Environment Research Agency (FERA)	Advises on biological and chemical risks and wildlife management.
Rural Payments Agency (RPA)	Registers land and records movements of livestock through the British Cattle Movement Service (BCMS).
Veterinary Medicines Directorate (VMD)	Promotes animal welfare by assuring the quality, safety and efficacy of veterinary medicines.
Cabinet Office	
Civil Contingencies Secretariat (CCS)	Coordinates the response to a major outbreak of exotic animal disease.
Department of Agriculture and Rural Development Northern Ireland (DARD)	Devolved responsibility for Northern Ireland.

Department of Health	
Health Protection Agency (HPA)	Manages animal diseases that can be transmitted to humans.
Department for Transport	
	Provides advice on transport during an outbreak of exotic disease.
Department for Work and Pensions	
Health and Safety Executive (HSE)	Regulates risks to health and safety, and conducts laboratory inspections for Defra.
Food Standards Agency	
Meat Hygiene Service	Controls the standards of hygiene in slaughterhouses and cutting plants.
Home Office	
Animal Procedures Committee (APC)	Advises on the use of animals for experimental purposes.
UK Borders Agency (UKBA)	Works with AHVLA and local authorities to enforce import controls for animals.
HM Revenue & Customs	
	Responsible for border controls on imports and exports of livestock.
Ministry of Defence	
	Provides military support in major outbreak situations.
Local authorities	
	Enforces some animal health legislation and investigates welfare issues.
Association of Port Health Authorities	Responsible for some health controls at sea and airports.
Veterinary Representative Bodies	
British Veterinary Association	Represents the interests of vets.
Royal College of Veterinary Surgeons	
Royal Society for the Prevention of Cruelty to Animals (RSPCA)	Investigates and prosecutes instances of animal cruelty.
Red Tractor Assurance (RTA)	Industry-funded food assurance scheme, covering production standards on safety, hygiene, animal welfare and the environment.

Source: National Audit Office

Appendix Five

Endnotes

Reports by the Committee of Public Accounts

- 1 HC Committee of Public Accounts, *The 2001 Outbreak of Foot and Mouth Disease*, Fifth Report of Session 2002-03, HC 487, 14 March 2003.
- 2 HC Committee of Public Accounts, *Foot and Mouth Disease: Applying the lessons*, Ninth Report of Session 2005-06, HC 563, 1 November 2005.
- 3 HC Committee of Public Accounts, *Identifying and tracking livestock in England*, Twenty-seventh Report of Session 2003-04, HC 326, 6 July 2004.
- 4 HC Committee of Public Accounts, *Department for Environment, Food and Rural Affairs: The health of livestock and honeybees in England*, Thirty-sixth Report of Session 2008-09, HC 366, 14 July 2009.
- 5 HC Committee of Public Accounts, *Flood risk management in England*, Sixty-fourth Report of Session 2010-2012, HC 1659, 31 January 2012.

Other Inquiries

- 6 Sir Iain Anderson CBE, *Foot and Mouth Disease 2001: Lessons to be Learned Inquiry Report*, HC 888, 22 July 2002.
- 7 Sir Iain Anderson CBE, *Foot and Mouth 2007: A review and lessons learned*, HC 312, 11 March 2008.
- 8 Richard Macdonald, *Striking a balance: reducing burdens; increasing responsibility; earning recognition. A report on better regulation in farming and food businesses*, Crown, May 2011.
- 9 Environmental, Food and Rural Affairs Committee, *Uncorrected Transcript of oral evidence: The Rationalisation of AHVLA*, HC 1805, 1 February 2012.
- 10 Animal Health, *Exercise Silver Birch 2010: National Foot and Mouth Disease Exercise Evaluation and Lessons Identified Report*, Crown, March 2011.
- 11 England Advisory Group on Responsibility and Cost Sharing, *Final Report*, Crown, December 2010.

Reports by the Comptroller and Auditor General

- 12 Comptroller and Auditor General, *Department for Environment, Food and Rural Affairs, Geographic information strategy*, Session 2010–2012, HC 1274, National Audit Office, July 2011.
- 13 Comptroller and Auditor General, *Department for Environment, Food and Rural Affairs: Managing front-line delivery costs*, Session 2010–2012, HC 1279, National Audit Office, 22 July 2011.
- 14 Comptroller and Auditor General, *The Cabinet Office: Implementing the Government ICT Strategy: six-month review*, Session 2010–2012, HC 1594, National Audit Office, 21 December 2011.



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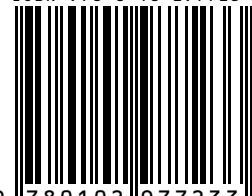
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