Animal Health and Veterinary Laboratories Agency

Surveillance 2014

Changes to the delivery of Veterinary Scanning Surveillance in England and Wales

December 2013
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EXECUTIVE SUMMARY

1. The purpose of surveillance is to provide high quality intelligence on animal health and welfare to enable farmers, the veterinary profession and governments to take decisions which can improve animal health, welfare and productivity. It provides data that allows threats to public health, trade, and wider society from animal diseases to be identified and managed. Veterinary scanning surveillance enables early detection of new and re-emerging animal related threats so that prompt action can be taken to reduce their impact. It detects new threats to human health (e.g. Bovine Spongiform Encephalopathy), new threats to animal health and welfare (e.g. Schmallenberg virus) and also acts as a safety net for the detection of known notifiable diseases (e.g. Classical Swine Fever and Foot and Mouth disease).

2. Private veterinary practitioners are an important source of data and intelligence on new and re-emerging diseases in farmed animals under their care. Farming, veterinary and non-governmental organisations are also significant sources of intelligence for scanning surveillance in farmed animals and wildlife. At present scanning surveillance in England and Wales is carried out mostly by AHVLA working in partnership with private veterinary practitioners and universities gathering intelligence through the provision of a post-mortem examination (PME) and diagnostic service. This enables detection of new and re-emerging threats. Findings are evaluated and raised to the Chief Veterinary Officers, public health officials, relevant policy teams, private veterinary surgeons and industry.

3. The 2010 UK Veterinary Surveillance Strategy Review and subsequent 2011 AHVLA Sustainable Surveillance Project (ASSP) report both highlighted areas where scanning surveillance could be improved. Against the background of these past reviews, changing economic pressures on government and industry and a changing national and global picture of threats, the Surveillance Advisory Group (SAG) report 2012 defined future requirements of a new surveillance model. It provided a set of recommendations which should contribute to more efficient and effective surveillance in England and Wales with industry and government sharing ownership and the benefits. There is also an opportunity to further develop the scanning surveillance system as a shared responsibility between government, livestock owners, private veterinary practitioners and the wider livestock industry. All have their part to play and each require overlapping, but different, outputs from the system. Government has an important role and will continue to provide the parts of the system that only Government can provide.

4. The Surveillance 2014 project was tasked to design an effective and affordable farmed animal disease surveillance system (that also provides wildlife surveillance) for England and Wales that delivers the requirements and recommendations of the Surveillance Advisory Group report. The project also took into account views from a public consultation process on future options for surveillance “Surveillance 2014 and beyond”. This document describes the core elements of the future surveillance model for England and Wales and the business case that underpins this model.

5. Key elements of the restructured model are:
   - A geographically distributed network of government vets to conduct on farm investigation and engage with the range of potential intelligence providers.
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- Training and supporting private veterinary practitioners and the fallen stock industry to jointly provide expertise and facilities to enable a large increase in the number of diagnostic post-mortem examinations (PMEs) carried out to investigate disease incidents.
- Further development of the AHVLA Species Expert Groups to act as virtual species based centres of expertise and a focus for surveillance intelligence gathering and analysis in their species and in the dissemination of findings.
- Retaining a smaller, but still geographically well distributed, network of AHVLA PME facilities and expert pathologists. These facilities have been chosen due to their proximity to the main centres of populations of farmed animal species and these locations will, along with the species expert groups, act as centres of expertise for these species.
- Providing a carcass transport service to ensure that while the private provision of a gross pathology service develops AHVLA is able to maintain surveillance coverage.
- Including other providers of high quality PME facilities and expert pathologists within the surveillance system.
- A new surveillance intelligence unit:
  - To engage with alternative data sources to improve coverage – including, initially - data from private laboratories, active intelligence gathering from private vets, establishing collaborative surveillance networks, monitoring changes in animal keeping that could be precursors for disease or welfare risks and networking with industry bodies.
  - To support data capture, exploration, collation, analysis, reporting and use of surveillance findings to trigger risk mitigation measures or further research.
  - Supported by ready access to relevant population and risk factor data.
- Maintaining and improving expertise within AHVLA in pathology, disease investigation, species, systems, and epidemiology. Also greater working with others in industry and academia to ensure the best expertise is used in gathering and analysing intelligence.
- Development of a purposeful partnership with non-government organisations
- An efficient diagnostic testing service.
- A new governance system for scanning surveillance that includes Defra and the Welsh Government, the veterinary practitioner community and representatives from other industry stakeholder organisations to ensure that scanning surveillance is fit-for-purpose, cost-effective, and informs risk management in the future.

6. The model includes re-design of scanning surveillance infrastructure, and suggests that cost savings in the delivery of scanning surveillance can be achieved by:
- making more use of data and intelligence captured by others.
- modernising back office processes, and data/information management.
- reducing the number of AHVLA PME sites in England and Wales from 14 to 6 (plus using skills and facilities based at AHVLA Lasswade in Scotland) and therefore making savings in estate costs and staff time due to more efficient working in fewer locations.
- reducing the number of post-mortem examinations done by AHVLA and the time AHVLA veterinary staff spend working on routine diagnostic submissions where little or no surveillance data is collected. This will allow them to concentrate on
developing and maintaining specialist pathology and epidemiology expertise. To counter this, the network of non-AHVLA expert pathology providers will be expanded. AHVLA will either run a tender exercise or establish a provider approval scheme (probably with a fixed fee for service) for the provision of subsidised expert (second opinion) pathology services. Data gathered by these providers will be accessible to AHVLA through the surveillance network.

7. The net present value of the new model over a 10 year period is estimated to be £8.2m with break even in year 3. This does not include the sale or release value of estate vacated. There are currently approximately 44 vets and 45 administrative and support staff that spend most of their time on scanning surveillance activities. This will reduce to approximately 35 vets and 30 administrative and support staff. These figures do not include staff in the Laboratory Services Department which carries out laboratory testing on surveillance samples and which has recently completed a reorganisation programme. The new model will deliver scanning surveillance in financial year 2014/15 for a cost of £7.2m (not including estate costs), 69% of which will be paid by government and 31% by industry in the form of payments for diagnostic tests and PMEs.

8. The model involves a reduction in the surveillance data collected by the provision of a government run diagnostic PME service and an increase in the collection and analysis of other data sources to enable the detection of new and re-emerging threats. There is potential for these other data sources to further reduce the need for government to provide a diagnostic PME service as a way of detecting new threats, although an expert PME capacity for the investigation and characterisation of threats will still be needed. However this is, as yet, unproven and there is a need to undertake pilot studies to assess the practicality and effectiveness of this change in methodology. The expansion of the provision of expert PMEs by other non-government providers and of private veterinary practitioner PMEs has the potential to greatly improve farmers access to PME services. This will improve the capacity for the diagnosis of known diseases and have a beneficial effect on animal health and welfare. It will also provide a greater knowledge base to enable the detection of new and re-emerging animal related threats.

9. There are known and accepted risks in implementation of this model, in particular if stakeholders fail to engage with AHVLA, or if practitioners and farmers fail to develop local solutions to the need for private vet diagnostic PMEs or make use of the diagnostic service. The impact of these will be mitigated by continuation of an expert advice and diagnostic system along with phased introduction of the new model with training and on-going assessment. There is a risk that other providers of expert gross pathology will decide not to become part of the surveillance system. However all the Veterinary Schools need a throughput of carcases for teaching purposes and initial discussions with many of them have been very positive. Private vets and the fallen stock industry may choose not to offer a PME service to farmers. However in the public consultation many vets said that if they could access appropriate training it is work they would be very keen to undertake. Discussions with the fallen stock industry have also been very positive. A reduction in AHVLA staff and facilities will have an impact, albeit small, on the agency’s ability to mount a response to a major disease outbreak.
1. INTRODUCTION

Scanning surveillance enables early detection of new and re-emerging threats in animals so that prompt action can be taken to reduce their impact. There were 20 new and re-emerging threat investigations triggered by scanning surveillance in 2011 (AHVLA data). In recent years the programme has been responsible for the early detection of pandemic (H1N1) 2009 influenza virus in pigs, four of the seven avian notifiable disease outbreaks in poultry, bovine tuberculosis in non-bovine species, antimicrobial resistance in Salmonella, virulent psoroptic mange in cattle, feed related vitamin A toxicity in lambs and the introduction of Schmallenberg virus. In addition, the programme has provided reassurance of the national animal health status which has supported international trade and has allowed substantial savings in Transmissible Spongiform Encephalopathy surveillance. Scanning surveillance also detects food safety threats, helps to fulfil statutory national and international disease reporting requirements, identifies welfare problems and suspect adverse medicines reactions.

The AHVLA scanning surveillance programme cost approximately £10 million in 2010/11 and the income available will reduce to £7 million by 2014/15 with the taxpayer contributing 70% of the cost and the private veterinary surgeon and farmers contributing 30%. The AHVLA Sustainable Surveillance Project (ASSP) report cites economic case studies carried out in 2010 which suggest the benefits derived from the programme greatly exceeded its cost over recent years.

This paper describes a more effective and affordable approach to scanning surveillance in light of changing circumstances. The approach proposes a change in emphasis, from relying so heavily on PMEs in Government run facilities to detect new threats, to a more systematic engagement with stakeholders, more collaboration with industry and provision of more resource from non-government sources. This will generate intelligence as well as samples for diagnostic investigation. Scanning surveillance will be underpinned by an intelligence network that is supported by a quality assured diagnostic capability, including quality assured PMEs. The latter is fundamental to its success as it is critical to be able to distinguish new threats from the wide and varied landscape of endemic diseases.

This work is being delivered under the Surveillance 2014 Project, which forms an essential component of the Shaping AHVLA Strategy. The project is seeking to identify ways to undertake surveillance both more effectively and at an affordable cost to the taxpayer.

The project builds on the recommendations from the independent Surveillance Advisory Group (SAG) report which formed the basis for the requirements of a scanning surveillance system as detailed in Table 1 below:
Table 1: List of surveillance system requirements from the Surveillance Advisory Group report (2012)

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service</td>
<td>Ensure timely and cost effective diagnostic service provision (including post mortem) to the standard of quality required to inform action.</td>
</tr>
<tr>
<td>Service</td>
<td>Ability to commission further work and research to increase diagnostic and investigative capability during disease emergencies that will allow rapid response to outbreaks by providing a network of effective disease investigators with different types of species/discipline expertise.</td>
</tr>
<tr>
<td>Service</td>
<td>A surveillance network that covers livestock and other species (e.g. wildlife, exotics, equine and small animals); alert to issues in and beyond GB, particularly in Europe.</td>
</tr>
<tr>
<td>Data</td>
<td>Ensure early detection of new or re-emerging threats in animals (livestock and other species groups) that allows timely mitigation of impact on public health, animal welfare, livestock productivity and wider society.</td>
</tr>
<tr>
<td>Data</td>
<td>Monitor production, endemic disease and welfare in animals (farmed livestock and other species groups) to establish baseline indicator data.</td>
</tr>
<tr>
<td>Data</td>
<td>Ensure access to and availability of diagnostic material and information that provides data suitable for research and epidemiology (e.g. modeling, risk analysis) that is aimed at improving production and protecting animal health, public health and food safety.</td>
</tr>
<tr>
<td>Data</td>
<td>Integration of data from multiple sources to allow generation of valid animal disease intelligence.</td>
</tr>
<tr>
<td>Expertise</td>
<td>Ensure the availability of timely expert veterinary investigation capacity to provide advice to the livestock industry and to inform Government policy on animal health issues.</td>
</tr>
<tr>
<td>Expertise</td>
<td>Ensure systematic engagement of relevant stakeholders and flow of information to facilitate communication (e.g. PVS, livestock industry etc.).</td>
</tr>
<tr>
<td>Expertise</td>
<td>Training of undergraduate veterinarians, PVS and Government veterinarians to improve and maintain their knowledge and thereby strengthen practice and farm level surveillance.</td>
</tr>
<tr>
<td>Governance</td>
<td>A governance structure that can ensure strategic delivery and guide the use of resource to respond to changing priorities.</td>
</tr>
<tr>
<td>Governance</td>
<td>Achieve assurance of disease freedom to facilitate industry and international trade through routine surveillance of non-statutory and statutory testing.</td>
</tr>
</tbody>
</table>

2. STRATEGIC CASE

This chapter sets out the strategic case for a new surveillance model. It summarises the background to the Surveillance 2014 project, its rationale, the objectives of the project and the wider strategic initiatives that the new model will support.

2.1 Background

The Animal Health and Welfare Strategy for Great Britain identifies four reasons for government intervention in animal health and welfare where the market on its own cannot deliver some or all of the objectives. These are:

- To protect human health
- To protect and promote the welfare of animals
- To protect the interests of the wider economy, environment and society
• To facilitate international trade

Veterinary surveillance contributes to all these objectives and therefore Government has a role in Veterinary Surveillance where the market on its own cannot deliver all the objectives.

The Defra veterinary surveillance strategy review (2010) identified the purpose of surveillance as –

To detect changes in prevalence, severity or distribution of animal disease in order to initiate investigative or control measures. Surveillance is not an end in itself but a tool to guide decision making. It is useful for:

• Measuring the effectiveness of the statutory disease control programmes
• Protecting public health
• Understanding and measuring the impact on animal disease of climate change
• Detection of new and re-emerging disease, infection or toxicity
• Providing assurance of freedom from specified diseases
• Detection of incursion of a disease which is not usually present (exotic disease)

Scanning surveillance monitors the health of defined populations in order to increase the likelihood that there will be timely detection of undefined or unexpected threats or of changes in the occurrence of endemic disease. At present scanning surveillance in England and Wales is carried out mostly by AHVLA working in partnership with private veterinary practitioners and universities. Engagement with private veterinary practitioners is facilitated by the provision of a post-mortem examination, diagnostic and expert advice service. This enables detection of new and re-emerging threats, which can then be communicated through the veterinary and farming press and through veterinary and industry species interest groups. Findings are evaluated and raised if significant enough through expert and risk groups to the Chief Veterinary Officers, public health officials and relevant policy teams.

From December 2012 to February 2013 AHVLA carried out a public consultation on the future of veterinary scanning surveillance. This included an on-line survey, 10 facilitated workshops around England and Wales and written submissions. In total 377 individuals and organisations participated. A summary of the findings can be seen at http://www.defra.gov.uk/ahvla-en/about-us/consultations/surveillance-2014-and-beyond/. Appendix 8, section 3 details the main findings from the consultation and how the new model aims to address these.

2.2 Why change is needed

There are four main drivers for change -

2.2.1 The Defra Veterinary Surveillance Strategy review (2010) made the following recommendations –

• Maintain focus on ensuring surveillance activities capture data from animals that are representative of the populations of interest, in respect of key criteria such as the different industry sectors (beef versus dairy, large versus small holdings, etc), and the geographic distribution of these animal populations. If necessary this should be at
the expense of sensitivity of detection and quality of primary data. This will ensure an even distribution of risk; reducing the likelihood of very late detection should disease occur first in under-represented sectors.

- Ensure effective geographic footprint of surveillance activities through affordable mechanisms for stakeholder engagement and surveillance intelligence gathering, which takes account of the structure of the different animal industry sectors.
- Explore and develop new approaches to capturing surveillance data that are more cost-effective, as exemplified by initiatives with the horse and wildlife sectors.
- Enable delivery bodies to take on more responsibility for implementing the VSS to meet Government and industry requirements, including developing holistic solutions to any critical deficiencies, and offering expert insight on emerging requirements.
- Review governance arrangements for implementing the VSS, including re-establishing the Programme Board, but re-configuring it in the light of the conclusions from this review.

2.2.2 Independent Surveillance Advisory Group, chaired by Professor Dirk Pfeiffer, published its final report in March 2012. In the Executive summary the report states:

“The effectiveness of the current surveillance model in England and Wales relies heavily on voluntary submissions for diagnostic examination (primarily post-mortem examination) by farmers and private veterinary surgeons (PVS). While it has had some successes over the past few years, its limitations have also become apparent. The current system provides approximately 50% coverage for livestock holdings within an hour’s distance to a surveillance facility; it is expensive to maintain within the current Government budget allocation; stakeholder engagement and intelligence exchange could be improved; and it does not encourage development and maintenance of expertise amongst those involved in the diagnostic service”

The report made three core recommendations:

**Core recommendation 1:**
Establish a tiered surveillance network that provides an improvement from the current level of approximately 50% of holdings and animals having access to a post-mortem facility or collection point within an hour’s travel time, with the aim of achieving such access for 95% of holdings and animals.

**Core recommendation 2:**
Establish species-based centres of expertise providing in depth pathology and disease investigation services and a focus for surveillance information management, analysis and dissemination. These will require a case load that is sufficiently high to allow development and maintenance of required levels of expertise, which will influence the number of centres to be included in the surveillance system.

**Core recommendation 3:**
Consider the current roles and responsibilities of existing Animal Health and Veterinary Laboratories Agency (AHVLA) veterinary staff, with a view to establishing different tiers of expertise compatible with variation in the technical knowledge requirements of the tiered surveillance network structure referred to in core recommendation 2. The suggested levels of
expertise are investigators to support private vets, gross pathologists and subject-specific experts. It is expected that most will have more than one level of expertise.

2.2.3 The current staffing situation is unsustainable

The number of Veterinary Investigation Officers (VIOs) based at the AHVLA regional laboratories has fallen over the last few years as funding has been reduced. In some locations the number of VIOs has fallen below sustainable levels and as a result carcases are being transported between locations. A similar situation has occurred with scientific and support staff. Staff are regularly covering work at distant locations due to staff leave, training or sickness. Overall, current staffing levels of VIOs and support staff are insufficient to sustainably maintain the current model.

2.2.4 The current system is becoming unaffordable

The budget for scanning surveillance for animal related threats is held on behalf of both England and Wales by Defra (Table 2). Policy responsibility for animal health and welfare in Wales was devolved to the Welsh Government in 2005.

Table 2: Budget for AHVLA scanning surveillance in England and Wales

<table>
<thead>
<tr>
<th></th>
<th>Actual 10/11</th>
<th>Actual 11/12</th>
<th>Actual 12/13</th>
<th>Budget 13/14</th>
<th>Budget 14/15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government funding</td>
<td>£8.0</td>
<td>£6.7</td>
<td>£6.1</td>
<td>£5.3</td>
<td>£5.0</td>
</tr>
<tr>
<td>Income from chargeable work</td>
<td>£2.2</td>
<td>£2.1</td>
<td>£2.3</td>
<td>£2.2</td>
<td>£2.2</td>
</tr>
<tr>
<td>Total funding</td>
<td>£10.2</td>
<td>£8.8</td>
<td>£8.4</td>
<td>£7.5</td>
<td>£7.2</td>
</tr>
</tbody>
</table>

The reduction in Defra funding for scanning surveillance is in line with the 2010 Comprehensive Spending Review. It should be noted that Government also provides support for surveillance activities through the provision of the AHVLA estate which is accounted for separately and not paid for out of the income from Defra shown in Table 2. Defra Estates are also required to cut their costs by a similar factor and therefore there is a need to make significant savings across the AHVLA from the more efficient use of buildings. Appendix 1 provides further details of AHVLA estate costs. Part of this estate saving can be made by collocating elements of the two former agencies and sharing offices and facilities where appropriate. However, there is also a need to save estate costs within the AHVLA regional laboratory network.

2.3 Opportunities

These drivers combine to form a compelling case for the need to change the current scanning surveillance system. This presents an opportunity to develop a system that improves the quality of the surveillance and is less costly to the tax payer.

The merger of Animal Health and the Veterinary Laboratories Agency in 2011 has given opportunities to realise the benefits of expertise, resources and data systems across the new Agency.
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There is also an opportunity to further develop the scanning surveillance system as a shared responsibility between government, livestock owners, private veterinary practitioners and the wider livestock industry. All have their part to play and each require overlapping, but different, outputs from the system. Government has an important role and will continue to provide the parts of the system that only government can provide.

The objectives of the changes are:

- Improve coverage and representativeness of the surveillance system to enable early detection of new and re-emerging threats
- Widen the surveillance network, to include private practitioners, other providers such as universities and AHVLA facilities
- Increase stakeholder engagement and intelligence exchange with surveillance being a shared responsibility
- Develop and maintain skill levels of all those working within the surveillance system
- To create an affordable and sustainable system.

3. THE NEW MODEL

Veterinary scanning surveillance enables early detection of new and re-emerging animal related threats so that prompt action can be taken to reduce their impact. Private veterinary practitioners are pivotal in gathering intelligence on new and re-emerging diseases in farmed animals under their care. Their relationships with their farmer clients and with the surveillance system are of paramount importance in ensuring the relevant intelligence is relayed from the farm to the surveillance system for integration and analysis. Farming, veterinary and non-governmental organisations are also significant sources of intelligence for scanning surveillance in farmed animals and wildlife.

The new model is an intelligence driven scanning surveillance system utilising data gathered from various sources. It is envisaged that private vets would undertake a greater number of post-mortems and this will contribute in a more extensive manner to the intelligence driven scanning surveillance system. Training will be made available and support will be provided to the private veterinary surgeons to enable them to contribute more fully to the surveillance system. Intelligence will be gathered from private vets primarily through the provision of expert veterinary advice, supplementary diagnostic testing, the provision of a post-mortem examination service (for suitably triaged cases) and systematic networking. The system will work to facilitate the further development of diagnostic pathology in the private and university sectors to improve access to these services and to reduce the reliance on AHVLA post-mortem facilities. It will develop partnerships with other intelligence providers to ensure a wide net is cast in the early detection of threats.

The intelligence gathered will be integrated and analysed by both expert scrutiny and computer-aided analysis to detect potential new and re-emerging threats. These threats will be thoroughly investigated and risk assessed. Any new risks and their potential impact will be communicated rapidly to decision makers in government and in the livestock industry.

It is recognised that the new system will have some different advantages and disadvantages when compared with the previous system. For example fewer PMEs being carried out by
expert pathologists may result in a lower sensitivity of detection of alerts in the population covered by the previous system. However higher numbers of PMEs being carried out by private practitioners will improve coverage and increase the sensitivity of detection of new threats in the animal population not covered by the previous post-mortem system (approximately 50%).

The major elements of this system will be:

3.1 A geographically distributed network of government vets to conduct on farm investigations, and engage with the range of potential intelligence providers. The merger of Animal Health and the Veterinary Laboratories Agency has created the opportunity to use a larger number of government vets in collecting surveillance intelligence during the course of their work. For example, information from negated suspect notifiable disease cases is valuable for scanning surveillance. Also the more geographically dispersed field staff have local contacts and can more efficiently make farm visits to investigate suspect new and re-emerging threats.

3.2 Training and supporting private veterinary practitioners and the fallen stock industry to jointly provide expertise and facilities to enable an increase in the number of diagnostic post-mortems carried out to investigate disease incidents. AHVLA recognises that many post-mortem examinations are already undertaken outside government and the University systems. Large numbers of PMEs are carried out in the poultry sector (in company or practice facilities) and some private vets already carry out PMEs on farm or at intermediate plants (knacker yards) for pigs and other farmed animals. PMEs are also carried out on zoological animals and wildlife in a range of locations.

AHVLA will work to improve scanning surveillance coverage of livestock populations through supporting the expansion of PME provision by private veterinary practitioners. The provision of a PME service will be a business decision by the private vet who may need to pay the fallen stock contractor for the use of their premises and will make an appropriate charge to the farmer. AHVLA will not initially routinely collect data on these diagnostic PMEs but will engage with the private vet to ensure that there is communication of intelligence on potential new and re-emerging threats and run a pilot scheme in one or more area to assess the practicality and usefulness of collecting such routine data. Figure 1 shows the location of fallen stock plants licenced for TSE sampling, it is thought that these are the mostly likely sites to be suitable for carrying out PMEs by private vets.
Figure 1. Location of fallen stock plants approved for TSE sampling.

An increase in private vet gross pathology will help create a tiered surveillance network with information flow as follows:

1. Farmer
2. Vet on farm
3. Vet undertaking gross pathology
4. Testing/advice from diagnostic lab
5. PME at expert pathology site
6. Further investigation/research.

It may well be that a different system for provision of gross pathology develops in different areas or for different species. In some areas each individual practice may undertake PMEs just for their own clients, in some areas a practice could provide a service to surrounding practices and in some areas other providers may offer a service to practices. It is recognised that in some areas vet practices and other providers may not see a business justification for
providing a PME service although during the public consultation there was clear enthusiasm from many private veterinary practitioners to undertake this work.

More details on the actions AHVLA will take in this area, especially related to the training of private veterinary surgeons in gross pathology and work with the fallen stock industry is given in Appendix 2.

3.3 Further development of the AHVLA Species Expert Groups to act as virtual species based centres of expertise and a focus for surveillance intelligence gathering and analysis in their species and in the dissemination of findings. The virtual species expert groups will work very closely with the AHVLA experts in pathology and disease investigation based at the post-mortem locations (see section 3.4). These locations have been selected on the basis of their geographical proximity to centres of animal populations by species. The expert pathologists and expert disease investigators at these locations will develop specialist expertise in the species. Recruitment and staff training in these locations will be in line with the species expertise being developed which will result, over time, in a concentration of species specific pathology and investigatory skills in these locations. The Species Expert Groups will functionally join up the species expertise in pathology and expert disease investigation based at the relevant geographical locations with other experts, inside and outside AHVLA, such as virologists, epidemiologists, parasitologists, clinicians etc. The Species Expert Groups will have the primary role, with the assistance of the Surveillance Intelligence Unit (see section 3.7), in translation of the intelligence into communications to CVOs, risk groups, the private veterinary surgeons and to the livestock industry.

All AHVLA PME locations will continue to undertake suitably triaged PMEs on all species. However the following AHVLA post-mortem locations were selected on the basis of their proximity (or other access to) the following species populations (see Appendix 1).

Table 3: AHVLA PME locations with the best access to various species

<table>
<thead>
<tr>
<th>Species</th>
<th>Locations with best access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pigs</td>
<td>Bury St Edmunds and Thirsk</td>
</tr>
<tr>
<td>Beef cattle</td>
<td>Carmarthen, Shrewsbury and Thirsk</td>
</tr>
<tr>
<td>Dairy cattle</td>
<td>Carmarthen and Shrewsbury</td>
</tr>
<tr>
<td>Sheep</td>
<td>Carmarthen, Penrith and Shrewsbury</td>
</tr>
<tr>
<td>Poultry</td>
<td>Bury St Edmunds, Lasswade and Shrewsbury</td>
</tr>
</tbody>
</table>

Carmarthen will be developed as a Centre of expertise for surveillance in extensive livestock production systems.

3.4 Retaining a smaller, but still geographically well distributed, network of AHVLA post-mortem examination facilities and expert pathologists. These facilities have been chosen due to their proximity to the main centres of populations of farmed animal species and these locations will, along with the species expert groups, act as centres of expertise for these species.

The consultation responses were mostly in favour of maintaining as much of the regional geographical footprint as possible. Thirsk in particular was identified as a location that respondents wanted to be kept due to the situation in respect of a significant part of the pig...
population. From all these considerations (geographical and population coverage and estate costs) the following model has been developed:

AHVLA will maintain PME facilities at Lasswade, Penrith, Shrewsbury, Carmarthen, Starcross, Bury St Edmunds and Thirsk. The PME facilities in Carmarthen may move to a more cost effective location in Carmarthen. This will reduce the number of animal holdings within a one hour drive of an AHVLA post-mortem facility from 48% at present, to 27%. Figure 2 shows the existing network of AHVLA Surveillance PME facilities and Figure 3 shows the new network.

**Figure 2. Existing network of AHVLA PME facilities**

**Figure 3. New network of AHVLA PME facilities**

AHVLA will cease to carry out PMEs at Aberystwyth, Truro, Preston, Newcastle and Luddington. Winchester will remain open as a PME location until summer 2015. The Aberystwyth site is not currently undertaking PMEs and is being used as a collection carcass point for onward transportation to Carmarthen, its continued use will be reviewed in March 2014. Options are currently being considered for the provision of an alternative PME and laboratory testing service in the Aberystwyth area. Langford and Sutton Bonington will cease to be AHVLA run PME sites but may continue to offer surveillance PMEs dependant on the procurement process for other providers of expert gross pathology (see section 3.6).

The new model is designed to strengthen the surveillance network outside government and put in place the mechanisms that would underpin any future move to a smaller AHVLA PME network when diagnostic mechanisms outside government and intelligence flow to ensure effective scanning surveillance are in place. Appendix 3 discusses why the decision was taken to not reduce the number of PME sites further at this time. It also gives the main features, the non-financial benefits and non-financial drawbacks for the new network of AHVLA post-mortem facilities.

3.5 **Providing a carcass transport** service to ensure that while the private provision of gross pathology services develops, AHVLA is able to maintain coverage for post-mortem examinations.
AHVLA will negotiate with fallen stock contractors to provide carcase storage facilities in areas where AHVLA PME sites will be closed (and there is no other suitable provider identified – see section 3.6) and also contract with transporters to move these carcases to an existing AHVLA site on a daily basis (5 days per week). At its simplest this may involve a single contractor in the relevant area collecting carcases and then transporting to a distant AHVLA site. In some cases this may be transport during the day (arrive by 3pm) or in some cases during the evening. In the latter case carcases up to the size of an adult pig would be stored in refrigerated units at the collection point before transport. There will be no other attempt to increase coverage of routine carcase collection into AHVLA facilities. The extended PM coverage recommended by the Surveillance Advisory Group will be achieved by private vet provision of PMEs (see section 3.2). AHVLA will provide the Welsh Government with a carcase transport service for a period of 3 years, which will serve an area that Welsh Government consider meets the needs of Wales.

The farmer will be responsible for getting the carcase to the collection point (either with own transport or by paying the fallen stock contractor to collect). AHVLA will pay for the transport costs from the collection point to the AHVLA PME facility. The cost of this transport will be funded by using a portion of the estate savings made by ceasing PMEs at some locations. The subsidy for this carcase collection services will be withdrawn after three years which will have given time for the private provision of diagnostic post-mortem examinations to have developed.

The recommendation from the Surveillance Advisory Group to establish a cost effective collection service, where necessary, to enable access to diagnostic service or achieve minimum case load is not affordable in this new model and access will be met by facilitating the expansion of non-government funded provision of post-mortem examination close to farms rather than the large scale movement of carcases longer distances to a government run facility. However where the PME of a carcase by an expert pathologist is considered to have very high surveillance value (eg after confirmation of the suspicion of a new or re-emerging threat) farmers will be offered free of charge carcase transport to an expert PME site.

Appendix 4 gives the main features, the non-financial benefits and the non-financial drawbacks for the carcase collection service.

### 3.6 Including other providers of high quality post-mortem facilities and expert pathologists within the surveillance system

AHVLA will run a tender (or a provider approval scheme and then a fixed fee for service) for the provision of expert pathology services from other providers. Appendix 5 details the suggested criteria these providers would need to meet.

It is likely that potentially interested organisations will include the veterinary schools and Scotland’s Rural College (SRUC). The locations of these sites are shown in Figure 4. SRUC is responsible for veterinary scanning surveillance in Scotland and maintains PME facilities in Southern Scotland that already undertake PMEs on carcases originating from farms in northern England. The five Veterinary Schools in England have a requirement to expose undergraduate students to farm animal PMEs and therefore need a certain throughput of carcases. They also train post graduate pathologists who need an appropriate case load. They have researchers who have an interest in disease surveillance and including them in the England and Wales scanning surveillance network has major advantages for both the Universities and the efficacy and efficiency of the scanning surveillance system.
In October 2012 AHVLA published a request for expressions of interest in the provision of expert pathology services and initial discussions with the Universities and other potential providers have been very positive. However further exploration of contractual arrangements can only be undertaken as part of a formal procurement exercise.

**Figure 4: Known potential providers of high quality PME facilities and expert pathologists.**

3.7 **A new Surveillance Intelligence Unit:**

- to engage with alternative data sources to improve coverage
- to support data capture, exploration, collation, analysis, reporting and use of surveillance findings, to trigger risk mitigation measures or further research
- supported by ready access to relevant population and risk factor data

It is planned to combine four full time posts in epidemiology and data analysis, the four full time heads of the largest Species Expert Groups and the Head of Surveillance Delivery in a work group of 9 staff that will form this unit. The unit will explore what data held by others could add value to the detection of new threats and then incorporate this into the information they assess and interpret. Initially (in 2014/15) £100,000/year will be budgeted for the external (non AHVLA) costs associated with the gathering of complementary data. The Unit will also draw expertise from the rest of the Species Expert Groups, the rest of the agency and non-government partners.
Changes to the delivery of Veterinary Scanning Surveillance in England and Wales

03/12/13
Version 1.1

The model involves a reduction in the surveillance data collected by the provision of a diagnostic post-mortem service and an increase in the collection and analysis of other data sources to enable the detection of new and re-emerging threats. There is potential for these other data sources to replace the need for government to provide a diagnostic post-mortem service as a way of detecting new threats, although an expert post-mortem capacity for the investigation and characterisation of threats will still be needed. However this is, as yet, unproven and there is a need to undertake pilot schemes to assess the practicality and effectiveness of this change in methodology. The new model provides resource for the exploration and analysis of these alternate data sources. The experience and knowledge generated will provide evidence for evolution of the model for scanning surveillance in the future.

There was extensive feedback during the public consultation process on potential extra data sources. The three most commonly identified were active data collection from private vets, abattoir data and data from private laboratories. However there was also concern expressed that abattoir data, while high in volume was low in quality and not best suited to detection of new and re-emerging threats.

Initially AHVLA will explore the potential for data from the following areas to enhance scanning surveillance:

- Data collected by private veterinary laboratories
- Active intelligence gathering from private vets. Intelligence gathered through meaningful engagement with private veterinary surgeons will be essential to identify possible new and re-emerging threats. A strategy for regular, active and measurable contact with private vets will be drawn up and implemented. This will build on the existing relationships with veterinary investigation officers and ensure that unusual incidents and problems continue to be notified to AHVLA. A pilot of a private vet/AHVLA vet telephone conversation log system has just ended. If analysis of the results show that it is useful for scanning surveillance it will be introduced as standard procedure.
- Establishing collaborative surveillance networks with key players. This will include the universities and specialist veterinary practices.
- Monitoring changes to demography and husbandry practices that could be precursors for disease or welfare risks. Most of this data already exists within AHVLA and work is needed to define what indicators are relevant.
- Networking with industry bodies. The species expert groups will develop a strategy for engagement with the major industry groups and establish procedures for processing and interpreting information gained and integrating this with data from other sources. AHVLA is aware of the initiatives within the livestock industry to develop appropriate endemic and new and re-emerging threat surveillance systems that deliver value to industry. AHVLA will work with industry and seek funding from non-government sources to facilitate the collection and analysis of data on the incidence and prevalence of endemic disease where this is needed by industry.

3.8 Maintaining and improving expertise within AHVLA in pathology, disease investigation, species, systems, and epidemiology. Also greater working with others in industry and academia to ensure the best expertise is used in gathering and analysing intelligence.
Changes to the delivery of Veterinary Scanning Surveillance in England and Wales

03/12/13
Version 1.1

AHVLA vets involved in the provision of expert gross pathology and expert investigation of threats/alerts will be based at one of the seven AHVLA surveillance PME facilities. The consultation responses called strongly for the maintenance of both local and species expertise and as many AHVLA post-mortem examination facilities as possible. The model achieves this but the need to sustainably staff viable facilities means that a network of more geographically dispersed expert investigators is not therefore affordable. The effect of this will be mitigated by using AHVLAs widely geographically dispersed network of field vets to help maintain local contacts and for initial on-farm investigations.

This role of the Veterinary Investigation Officer (highly skilled in pathology and disease investigation) will not be divided into the two distinct roles of pathologist and investigator as proposed in the consultation. This will help prevent the confusion over roles and responsibilities noted in the consultation feedback and in the longer term will help maintain flexibility for the provision of skilled pathologists. During the consultation many AHVLA staff members and private vets did not think that the division into pathologists and investigators was desirable as they felt that there was advantage in having a single person who was responsible for the investigation of an incident, ie who discussed the case with the practitioner, performed the gross pathology, interpreted the PME results along with any associated test results and reported back to the sender. There is a range of expertise in the current surveillance system and these will be developed further. Some Veterinary investigation officers will specialise more in pathology and undertake a higher proportion of the pathology than others. AHVLA will commit to the training of a number of these to reach Fellow of the Royal College of Pathologists (FRCPath) or equivalent and other specialisms recognised by the European Board for Veterinary Specialisation as appropriate. Some will specialise in other areas (eg parasitology, epidemiology) and many will use their expertise across the system via involvement in the work of the Species Expert Groups.

There are many tasks in the surveillance and regulatory activities of AHVLA that both veterinary investigation officers and veterinary officers have the skills and experience to undertake (eg field epidemiology investigations and notifiable disease report cases). AHVLA veterinary staff will use their skills across the range of agency work and this aspect of AHVLA veterinary workforce utilisation is being considered within the context of the implementation of the AHVLA Veterinary and Technical Strategy.

Veterinary staff at the locations listed in section 3.3 will develop their skills in the pathology and incident investigation of the relevant species. Staff at Carmarthen will develop surveillance expertise in extensive livestock production systems.

3.9 Development of a purposeful partnership with non-government organisations. AHVLA already has strategic partnerships with some other organisations including the veterinary schools, SRUC and private practitioners. These links will be strengthened where possible and new strategic links created with industry bodies that have an interest in collecting surveillance intelligence.

The major route for the flow of scanning surveillance information relies on the relationship between the farmer and the private vet and then with the relationship between the private vet and the surveillance system. It is widely recognised that engagement with private practitioners is the best way to collect scanning surveillance information as most farms have attending vets and they can provide first stage interpretation and assessment of the clinical information that their service to livestock farmers generates. It is therefore imperative that a system is in place to ensure good engagement between the private vet and the surveillance
system. As this information flow is voluntary the engagement needs to be a mutually beneficial if it is to be sustainable.

Appendix 6 gives more detail of how there will be maintenance and improvement to engagement with private vets.

Sections of the livestock industry have developed, or are developing, surveillance systems for endemic diseases. AHVLA, through the species expert groups, will develop strategic partnerships with industry bodies where AHVLA advice can be of assistance and/or where the intelligence gathered is also useful for detection of new and re-emerging threats. Under the data transparency agenda, AHVLA will make available as much of the data as possible to the industry, veterinary profession and academia to be enable them to exploit and add value for the mutual benefit of all parties.

AHVLA will measure the cost and value of various methods of engagement and each Species Expert Group will be responsible for deciding which methods provide the best value for money in their sector with the Head of Surveillance Delivery ensuring co-ordination across the species.

### 3.10 An efficient diagnostic testing service.

As part of an integrated surveillance system there needs to be access to a diagnostic testing system to allow diagnosis of known diseases. This diagnostic service and the associated expert advice will remain the major component of maintaining the mutually beneficial relationship between the private vet and the surveillance system. This will help ensure that the private vet notifies AHVLA of disease incidents which may lead to the detection of new or re-emerging disease. AHVLA will continue to provide a diagnostic service for submitted samples but will reduce the amount of veterinary time spent in supporting the diagnostic provision where little or no surveillance data is collected. The continued provision of a quality assured diagnostic testing service for surveillance also enables the maintenance of a cost effective capacity for international trade testing, high volume emergency response testing and the development of new tests in the future as technology or disease situations develop.

At present testing costs for postal submissions are completely recovered by the charges made to the private vet but a significant proportion of the time spent by Veterinary Investigation Officers is funded from the government provision for scanning surveillance. The time spent by Veterinary investigation Officers in undertaking PMEs, reporting results and discussing cases with private vets is subsidised because this has been considered to be the most effective way to collect surveillance data. The Surveillance Advisory Group Report stated that ensuring a timely and cost effective diagnostic provision was a requirement of the surveillance system (however provided) and the overwhelming opinion from the public consultation was that this continues to be the best method of collecting scanning surveillance intelligence on farmed animals. The new model will maintain this link with the private vet, via the diagnostic service as a way of gathering scanning surveillance intelligence.

Appendix 7 gives further details of how the efficiency of the diagnostic service will be improved.

### 3.11 A new governance system for scanning surveillance.

To include Defra and the Welsh Government, the veterinary practitioner community and representatives from other industry
stakeholder organisations to ensure that scanning surveillance is fit-for-purpose, cost-effective, and informs risk management in the future.

The governance model proposed in the consultation document received relatively little comment. Several people suggested that the industry involvement should be through the AHWBE and AHWSSG for Wales rather than inventing another group. This approach would add value and strengthen industry links. AHVLA will set up an England and Wales surveillance board and will work with Defra, the Welsh Government, the Animal Health and Welfare Board for England and the Animal Health and Welfare Strategy Steering Group for Wales to determine membership. Membership will endeavour to ensure cross industry links are forged to enable governance to be effective for all areas of animal keeping and production.

The head of surveillance would be responsible on behalf of the Agency for delivery of customer (government, private vets and livestock industry) requirements for scanning surveillance.

3.12 How the new model meets the recommendations from past reviews and reports. Appendix details how the new model meet the recommendations from the Defra Veterinary Surveillance Strategy review (2010), the recommendations from the Surveillance Advisory Group report (2011) and the consultation exercise undertaken between December 2012 and February 2013 on the future of scanning surveillance.

Table 4 gives a summary of the recommendations for change and the desired outcomes.
### Table 4: Summary of changes involved in the move to a new model for veterinary scanning surveillance

<table>
<thead>
<tr>
<th>Change</th>
<th>Desired outcomes</th>
<th>Notes</th>
</tr>
</thead>
</table>
| **Facilitating the undertaking of PMEs at fallen stock locations by private providers. Section 3.2** | 1. Better access to diagnostic PMEs for farmers leading to improved productivity and animal welfare.  
2. Larger numbers of dead animals examined by a vet leading to earlier detection of NRTs.  
3. Reduced reliance on government provision of diagnostic PMEs. | AHVLA to facilitate by working with the fallen stock industry to encourage them to provide facilities and by working with universities and others to ensure the provision of training in gross pathology for non-government vets. Provision of AHVLA expert support to those carrying out first opinion PMEs will improve quality and also engagement with the surveillance system to enable gathering of intelligence on potential NRTs. AHVLA will facilitate this change but not provide direct financial input into the service which will remain a commercial decision for those involved. |
| **Inclusion of a larger number of non AHVLA expert PME providers in the system. Section 3.6** | 1. Maximise access to expert PME facilities to maximise diagnostic capacity for farmers and surveillance intelligence.  
2. Greater partnership working with other providers to maximise surveillance intelligence gathering.  
3. Training in PME techniques is a vital part of veterinary education and the vet schools need an appropriate case load for this teaching. | Veterinary Schools and SRUC have expressed an interest in providing such services. AHVLA has an existing relationship the vet schools at London and Liverpool. Other providers may come forward during a procurement process. AHVLA would subsidise approved PMEs by these providers working to agreed quality standards and collect detailed data on presenting signs and diagnoses reached. |
| **Development of AHVLA veterinary staff roles and responsibilities including species based expertise Section 3.3 & 3.8** | 1. Continued access to high quality surveillance, investigatory, pathology, diagnostic and epidemiological skills for government and industry.  
2. Continued engagement of the private veterinary surgeons with the surveillance system to access this expertise and the collection of their intelligence on potential NRTs.  
3. Early detection of NRT alerts, expert investigation of alerts, rapid risk assessment of threats and appropriate communication to decision makers. | Greater species focus in the way scanning surveillance is organised. Heads of the AHVLA species Expert groups to become dedicated posts. Higher level training for some pathologists. Veterinary skills in both AHVLA laboratories and the more geographically dispersed field service to be used as part of the scanning surveillance effort. |
| **Establish a Surveillance intelligence unit with resources to collect and analyse non-AHVLA data sources to help detect NRTs threats. Section 3.7** | 1. Detection of potential NRTs less dependent on submission of samples to a laboratory.  
2. Better coverage of animal populations that are currently less well represented in the scanning surveillance data. | |
<table>
<thead>
<tr>
<th>Change</th>
<th>Desired outcomes</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improvement in back office processes to improve efficiency.</td>
<td>1. Reduced cost to government.</td>
<td>Involves modernisation of the AHVLA laboratory IT system to reduce paper &amp; fax transfers of data.</td>
</tr>
<tr>
<td>Section 3.10</td>
<td>2. Better diagnostic service provision.</td>
<td></td>
</tr>
<tr>
<td>Move to digital by default for sample submission and result reporting</td>
<td>1. Reduced cost to government.</td>
<td>On-line registration of submissions and digital reporting of results.</td>
</tr>
<tr>
<td>Section 3.10</td>
<td>2. Better diagnostic service provision.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Improved quality of surveillance data for analysis.</td>
<td></td>
</tr>
<tr>
<td>Reduction of AHVLA PME sites in England &amp; Wales from 14 to 6 plus</td>
<td>1. Reduced estate cost to government.</td>
<td>AHVLA Winchester is retained until July 2015 to enable PME facilities at the University of Surry to be completed.</td>
</tr>
<tr>
<td>using skills and facilities based at AHVLA Lasswade in Scotland for</td>
<td>2. Reduced staff costs due to greater efficiencies.</td>
<td>Maintenance of the AHVLA PME facility at Lasswade nr Edinburgh which provides an expert avian pathology service for both England and Scotland to the commercial poultry sector.</td>
</tr>
<tr>
<td>commercial poultry surveillance. Section 3.4</td>
<td>3. Sufficient throughput at all locations to enable the development and maintenance of expertise.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Concentration of resources to build centres of excellence.</td>
<td></td>
</tr>
<tr>
<td>Implementation of a carcass collection service for a 3 year period.</td>
<td>1. To mitigate impact on surveillance while private provision of diagnostic PMEs is developed.</td>
<td>Funding would need to come from the estate saving made by closure of the other AHVLA PME facilities. AHVLA will provide the Welsh Government with a carcass transport service for a period of 3 years, which will serve an area that Welsh Government consider meets the needs of Wales.</td>
</tr>
<tr>
<td>Section 3.5</td>
<td>2. Collection from areas where facilities have been closed will help mitigate local dissatisfaction at the withdrawal of the current service.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Collections from livestock dense areas could improve rather than just maintain the currently level of coverage for PMEs</td>
<td></td>
</tr>
<tr>
<td>Set up an England and Wales scanning surveillance board to provide</td>
<td>1. Greater stakeholder involvement in future decision on the structure of scanning surveillance.</td>
<td>Stakeholder representation could be via nominations from the AHWBE and AHWSSG for Wales. The Board would also contain representatives from the Welsh Government, Defra and private veterinary practitioners. The Board would create strong links with an appropriate counterpart in Scotland.</td>
</tr>
<tr>
<td>governance of the system. Section 3.11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NRT = new or re-emerging threat.  PME = Post-mortem examination
4. THE FINANCIAL CASE

The impact of implementing the new model is set out below.

Table 5: The NPV cost of the recommended model in each of the next 10 years

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7</th>
<th>Year 8</th>
<th>Year 9</th>
<th>Year 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>£m</td>
<td>£m</td>
<td>£m</td>
<td>£m</td>
<td>£m</td>
<td>£m</td>
<td>£m</td>
<td>£m</td>
<td>£m</td>
<td>£m</td>
<td>£m</td>
</tr>
<tr>
<td>Annual total</td>
<td>8.2</td>
<td>(1.7)</td>
<td>1.0</td>
<td>1.1</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.1</td>
<td>1.1</td>
<td>1.0</td>
</tr>
<tr>
<td>Running total</td>
<td>(1.7)</td>
<td>(0.7)</td>
<td>0.4</td>
<td>1.6</td>
<td>2.8</td>
<td>3.9</td>
<td>5.0</td>
<td>6.1</td>
<td>7.2</td>
<td>8.2</td>
</tr>
</tbody>
</table>

The figures in Table 5 are based on the following major assumptions –

- The exit costs included assume that there is no redeployment to vacant posts or staff relocation to new posts created at the remaining PME locations. They therefore represent a worst case cost.
- Any capital income received by Defra estates from the sale of the site at Luddington is not included.
- Any savings from early release from leases at Langford and Aberystwyth are not included.
- Any savings from handing back to Defra estates the parts of Winchester and Preston that are no longer required are not included.
Appendix 1: Location specific information

Table 6: Current AHVLA PME locations in England and Wales – species density within a one hour drive, estate costs and co-location information

<table>
<thead>
<tr>
<th>Site</th>
<th>Species density</th>
<th>Best two locations for coverage of holdings within a one hour drive for each species group</th>
<th>Testing lab on site in 2013/14</th>
<th>University site</th>
<th>Estate cost£'000K in 2012/13</th>
<th>Co-located with AH staff before 1/4/11</th>
<th>Other staff co-located to site after 1/4/11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aberystwyth</td>
<td></td>
<td>Yes</td>
<td></td>
<td></td>
<td>£108</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bury St Edmunds</td>
<td>Pou</td>
<td>P, Pou</td>
<td>Yes</td>
<td>£290</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carmarthen</td>
<td>D, B, S</td>
<td>D</td>
<td></td>
<td></td>
<td>£167</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Langford (Bristol)</td>
<td>P</td>
<td>Yes</td>
<td></td>
<td></td>
<td>£110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Luddington</td>
<td></td>
<td></td>
<td></td>
<td>£220</td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Newcastle</td>
<td></td>
<td>Yes</td>
<td></td>
<td>£209</td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Penrith</td>
<td>S</td>
<td>Yes</td>
<td></td>
<td>£277</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preston</td>
<td></td>
<td></td>
<td></td>
<td>£266</td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Shrewsbury</td>
<td>D, S</td>
<td>D, B, S, Pou</td>
<td>Yes</td>
<td>£566</td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Starcross</td>
<td></td>
<td>Yes</td>
<td></td>
<td>£128</td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Sutton Bonington</td>
<td>B, Pou</td>
<td>Yes</td>
<td>Yes</td>
<td>£391</td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Truro</td>
<td></td>
<td></td>
<td></td>
<td>£240</td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>Winchester</td>
<td></td>
<td></td>
<td></td>
<td>£127</td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
</tbody>
</table>

1 D=Dairy, B=Beef, S=Sheep, P=Pigs, Pou=Poultry.
2 Where a shared site has been shared for several years the costs given are for the exVLA portion only. At the other shared sites other staff have been relocated to the site since the merger on 1/4/11 and the costs shown are the whole site costs.

Sites maintained in new model for scanning surveillance PMEs

Table 7: Reasons for retaining PME facilities at sites

<table>
<thead>
<tr>
<th>Location</th>
<th>Surveillance reasons for retention</th>
<th>Other reasons for retention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bury St Edmunds</td>
<td>Good geographical location for access to poultry and pigs. Higher than median PME submissions for current locations. Primary location in Eastern England.</td>
<td>Colocation with other AHVLA staff and laboratory services therefore no estate savings from a move.</td>
</tr>
<tr>
<td>Carmarthen</td>
<td>Good geographical location for access to dairy cattle, beef cattle and sheep. Higher than median PME submissions for current locations. Primary location in Wales</td>
<td>Colocation with other AHVLA staff and laboratory services therefore no estate savings from a move.</td>
</tr>
<tr>
<td>Penrith</td>
<td>Good geographical location for access to sheep. Higher than median PME submissions for current locations. Primary location in Northern England west of Pennines.</td>
<td>Colocation with other AHVLA staff and laboratory services therefore no estate savings from a move.</td>
</tr>
<tr>
<td>Shrewsbury</td>
<td>Good geographical location for access to dairy cattle, beef cattle, sheep and poultry. Higher than median PME submissions for current locations. Primary location in central England</td>
<td>Colocation with other AHVLA staff and laboratory services and therefore no estate savings from a move.</td>
</tr>
<tr>
<td>Starcross</td>
<td>Primary location in South West England.</td>
<td>Colocation with other AHVLA staff and laboratory services and therefore no estate savings from a move.</td>
</tr>
<tr>
<td>Location</td>
<td>Benefits and Considerations</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>-----------------------------</td>
<td></td>
</tr>
<tr>
<td>Thirsk</td>
<td>Good geographical location for access to beef cattle and pigs. Higher than median annual PME submissions for current locations. No alternative providers of expert gross pathology expertise and facilities likely to be available in the region. Primary location in North England east of Pennines.</td>
<td></td>
</tr>
<tr>
<td>Lasswade</td>
<td>Higher than median PME submissions for current locations – all of which is poultry. Highly regarded by commercial poultry sector due to concentration of poultry expertise. Major location for second opinion expert histopathologists.</td>
<td>Colocation with other AHVLA staff and laboratory services and therefore no estate savings from a move. Very high risk in attempting to relocate.</td>
</tr>
</tbody>
</table>
Appendix 2: AHVLA actions, benefits and risks of training and supporting private veterinary practitioners and the fallen stock industry to jointly provide expertise and facilities to enable an increase in the number of diagnostic post-mortems carried out to investigate disease incidents

**Figure 5** shows the location of fallen stock sites licenced to undertake brain stem sampling for TSE (Transmissible Spongiform Encephalopathies) surveillance. There are approximately 43 licenced TSE sampling plants in England and Wales (excluding plants that just undertake rendering). It is likely that these locations will have facilities most appropriate for private vet first opinion PMEs.

**Figure 5. Location of approved TSE sampling plants and other fallen stock plants.**
AHVLA will –

- Work with the fallen stock industry to produce information and guidance for fallen stock contractors to allow individual operators to decide if they wish to offer their facilities for PMEs carried out by practitioners or other providers (not AHVLA staff). This will include information on health and safety, insurance, risks posed to their business by suspect notifiable diseases in their premises, facilities needed (lighting, hoist, tables etc).

- Work with other providers to ensure that good quality gross pathology training is available to private veterinary surgeons to enable consistent and accurate diagnosis. This formal training will be part of veterinary Continuing Professional Development and will be charged for by the training providers and cost neutral to the surveillance system. Included in this training will be sample taking from PMEs – which may be at AHVLA request following an initial discussion between the VIO and the private vet.

- Provide support mechanisms for private vets carrying out first opinion gross pathology. For example – a diagnostic testing service for postal samples, provision of sampling kits, provision of guidance on PM equipment (knives, loppers, gloves, personal protective equipment etc), access to AHVLA pathologists on phone, webinars or similar on pathological topics or recent cases etc. This support will be part of the strategic engagement with the vets and advice provided will not be chargeable.

- Investigate options for formal recognition of competence in first opinion gross pathology (e.g. module in Certificate in Advanced Veterinary Practice or similar).

- Develop timely data and intelligence exchange mechanisms to enable emerging threats identified by practitioner post-mortems to be escalated for assessment.

Benefits

- Improved knowledge of gross pathology and sampling for diagnosis by private veterinary practitioners resulting in higher diagnostic rate for sick/dead animals, leading to better business decisions by farmers and improved animal welfare.

- A higher proportion of dead animals will be examined by a veterinary surgeon after death leading to increased representativeness and coverage - both geographically and by species/sector.

- The private vet will have an improved knowledge of the normal landscape of endemic disease and an improved ability to detect new threats or changing patterns of known threats. The private vet is able to link production data, clinical data and PME data to detect new patterns of disease on the farm. Through planned engagement with the private vet and through the provision of a diagnostic service AHVLA Veterinary Investigation Officers (VIOs) will be able to gather the improved private vet intelligence on NRTs.

Risks

- There is a risk that the transport system as envisaged may not being able to provide a service from farms to PME facilities at reasonable cost or that is able to meet the practical needs of the users (timeliness of pick up). However current experience of working with fallen stock contractors in 3 regions to move carcasses between AHVLA locations has provided evidence of likely costs and practicalities in a future system which reduces this risk.
• Take up by farmers, private vets and fallen stock contractors may be low and the benefits are not realised. However there was a strong call for such a system from private vets responding to the public consultation and initial discussions with the fallen stock industry have been very positive.

• Take up by private vets is very large but they do not see the need or advantage of engaging with AHVLA for either follow-on testing or sharing of surveillance information and therefore intelligence on new and re-emerging threats is not gathered. This can be mitigated by having a dynamic and proactive engagement plan and ensuring that the surveillance system is offering the private vet something that cannot be gained elsewhere (e.g. comprehensive diagnostic back up, expertise, expert histopathology, research facilities etc).

• Evidence of NRTs or even notifiable diseases could be missed by private vets carrying out gross pathology. The combination of logistics of on-farm or fallen stock site post-mortem examinations, less expertise and fewer follow on tests will inevitably mean that the diagnostic rate and surveillance value of an individual PME will be less than from a post-mortem examination carried out by trained pathologists at a specialist centre. However this risk is mitigated by the provision of training, on-going support, and the larger numbers of carcasses being examined. The provision of a network of expert pathology facilities, although reduced, will also be maintained.

• Some other non-government providers of pathology currently have excellent facilities but have limitations on what cases they can handle in their PM facilities and have relatively limited expert pathology experience with farm animals. The number of farm animal PMEs being examined in these locations may not be sufficient for maintenance of expertise. However some providers are likely to increase their expert farm animal pathology skills in response to the new opportunities and may develop other services to farmers/private vet that helps maintain this expertise.
Appendix 3: New network of AHVLA post-mortem facilities

The main features are:

- Retention of the following AHVLA post-mortem examination facilities – Bury St Edmonds; Carmarthen; Lasswade; Penrith; Shrewsbury; Starcross; Thirsk. Winchester would remain open until the summer of 2015 and then close. Figure 3 shows these locations.
- Aberystwyth Langford and Luddington are likely to cease being AHVLA sites. The exVLA parts of Truro, Winchester and Preston are likely to be handed back to Defra estates (awaiting confirmation).

The non-financial benefits are:

- It maintains England and Wales geographic coverage for surveillance investigations and emergency response and for non-scanning surveillance gross pathology requirements of government (e.g. post-mortems on TB cases, food safety incidents, welfare investigations and research).
- Five of the locations that would stop performing post-mortem examinations currently do less than the average number of PM examination submissions for all locations and therefore generation and maintenance of expertise will be facilitated.
- Increased flexibility of estate use in the future. Currently the presence of a PME facility means that the location has to be retained and reduces flexibility. On sites that are currently shared with other AHVLA facilities the closure of the PME facilities may mean that in the future re-organisation and estate rationalisations will be possible.
- There is a concentration of the available expertise into fewer locations. The locations have been chosen based on geography (to get a spread over England and Wales), on the basis of their proximity to animal populations of various species and lack of potential for facilities and expertise to be provided by non-AHVLA providers.
- While all locations will deal with all species there will be a concentration of the species expertise in areas of high animal density for that species (see section 3.2).

The non-financial drawbacks are:

- It involves the cessation of PM examinations completely at six current AHVLA locations. Closure of locally valued AHVLA facilities could result in significant protest.
- The proportion of the animals and holding in England and Wales within a one hour travel time of an AHVLA location will reduce – from 48% to 27%.
- The inability to identify alternative providers of high quality facilities and expertise to undertake subsidised post-mortem examinations would potentially leave some geographical gaps in provision of this service and associated scanning surveillance data collection. This was commented on by many respondents in the public consultation, especially in relation to Winchester and the fact that both Bluetongue and Schmallenberg both appeared in the South East after blowing over from mainland Europe. However in initial discussions with several universities has been encouraging and other provider are likely to emerge during the procurement process.
- Closure of locally valued AHVLA facilities will be disliked by some in the local private vet community who as a consequence may cease to engage with AHVLA and their intelligence on new and re-emerging threats will be lost resulting in extended time to detect a new threat.
This can be mitigated by good communications and then a systematic plan of engagement in the following years. The continued provision of services that the private vet will find helpful (e.g. expert advice and diagnostic support) will help to maintain engagement.

- It is likely that due to the increased distances less live animals will be submitted to be euthanased prior to PME. This will reduce the ability to diagnose certain conditions including some types of NRTs. However the better training of private vets in PME techniques and good sample taking will help reduce this impact.

A further reduction in sites was considered by the project. However there are several things that mitigate against this at the current time.

- Further closures of PME facilities, apart from Thirsk and Carmarthen, would not save estate costs as there are multiple other AHVLA functions at the same site which are currently scheduled to remain at these sites. As the AHVLA estate situation changes in the future, closure of more PME sites may release an estates saving.

- Moving to an even smaller network has considerably higher transition costs and relatively low savings in terms of staff efficiencies.

- Data analysed for the ASSP report (Figure 6) showed that 64% of 117 first alerts for new and re-emerging diseases detected in recent years were detected from a post-mortem examination. Therefore a further reduction in the number of AHVLA PMEs before knowing the success of PMEs provided by private veterinary surgeons and the other expert providers to feed into the surveillance system would be very high risk.

- A further 28% of first alerts for new and re-emerging disease followed telephone contact between an AHVLA Veterinary Investigation Officer and the private vet or the submission of postal samples for diagnosis. Feedback from the public consultation was clear that the private vets wanted as large a network as possible and AHVLA experts who were relatively local with whom they could build up a relationship.
Figure 6: Source of first alert among 117 new or re-emerging hazards detected by VLA Scanning Surveillance projects in recent years (2001-2011 for avian, 2007-2011 for other species). Reproduced from the AHVLA Sustainable Surveillance Project (ASSP) Report, April 2011

Therefore reducing to a smaller AHVLA network at this time would not result in a significant saving of cost, would increase the transition costs and potentially jeopardise the routes that have historically detected 92% of the alerts for new and re-emerging threats. However as the provision of diagnostic pathology by other providers (both expert pathology by the Veterinary schools and others, and pathology by private veterinary practitioners) increases the need for a network of 6 AHVLA PME sites in England and Wales may decrease. It may then be possible to move to a network of 3 or 4 AHVLA PME locations allowing concentration of expertise and facilitate and the development and maintenance of that expertise. These locations would need to undertake some diagnostic pathology to ensure maintenance of expertise but their primary function would be to provide expert pathology to investigate alerts of new and re-emerging threats detected by engagement with private practitioners through an advice and diagnostic testing service and through the collection and analysis of intelligence from other sources.

The new model is designed to strengthen the surveillance network outside government and put in place the mechanisms that would underpin any future move to a smaller AHVLA PME network.
Appendix 4: Carcase collection service

The main features are:

A carcase collection service (as a contract with a non AHVLA provider) will be put in place for 3 years to collect carcasses from areas where AHVLA post-mortem facilities have been closed. This will ensure that surveillance information from these areas is not lost in the period while provision of diagnostic post-mortem examinations by other providers increases.

The non-financial benefits of this are:

- Carcase collection will help to maintain PME surveillance by AHVLA while the private vet first opinion PME provision is being developed. This helps mitigate any negative effect of closures on the diagnostic and surveillance systems.

The non-financial drawbacks of this are:

- Procurement issues (e.g. no providers being willing to do it for a reasonable price) may mean that coverage in areas where facilities have closed cannot be provided.
- Uptake may be poor resulting in loss of surveillance information.
- Uptake may be very good due to collection from farms and AHVLA receives requests for PME of an increased number of carcases. These would have to be reduced by triage and/or by the introduction of a charge for the transportation. This could cause tensions with the farming/private vet community and loss of engagement.
- There were calls in the public consultation for any carcase collection service commissioned by AHVLA to be an exemplar on how to run an ultra-bio-secure system. Using existing fallen stock contractors to collect from farm, and potentially move carcases, does not meet this call. However contracts will have appropriate biosecurity clauses and inspection on a daily basis when delivering carcases to AHVLA facilities will ensure compliance.
Appendix 5: Suggested criteria for inclusion of other providers of high quality PME facilities and expert pathologists within the surveillance system:

- Trained pathologists
- No conflict of interests
- High quality PME facilities for all farm animal species
- Covering an area of England or Wales with high livestock density that is not geographically well connected to an AHVLA 2nd opinion PME location.
- Likely to be paid on a per PME basis. All PME examinations will have been triaged before submission.
- Subsidised PMEs to be performed according to AHVLA standard operating procedures.
- Data entry will be into the AHVLA IT system.
- Samples from AHVLA triaged PMEs will be tested by AHVLA at no additional charge to the provider or farmer (as happens in the existing system for PMEs carried out by AHVLA or the London & Liverpool Surveillance Centres).
- AHVLA will encourage any other providers to develop an extended pathology offering outside of the AHVLA subsidised PMEs and ensure engagement with these providers to gather intelligence on new and re-emerging threats.
Appendix 6: Maintenance and improvement in engagement with the private vet will be driven by –

- Continued provision of expert advice.
- Continued provision of high quality comprehensive diagnostic capacity, largely paid for by industry. The current method of surveillance system engagement with the private practitioners is based largely on the provision of a post-mortem and sample testing service which provides the twin benefit of diagnosis for the farmer/private vet and surveillance intelligence for the surveillance system. The provision of this service means that private vets submit samples to AHVLA labs and discuss cases with VIOs. They do this to benefit their farming clients and to enable a diagnosis to be made. See section 3.7 for more details.
- Hosting of local private vet meetings
- Customer facing IT improvements, digital by default. AHVLA will develop, or work with partners to develop IT solutions which reduce the administration resource requirement in supporting the surveillance system for both veterinary practitioners and AHVLA staff. This will also enable better quality data, consistent data collection and improve the client experience. Funding for this has been applied for separately to the surveillance budget. Key steps are: –
  - An online submission form – this will make the selection of tests and postage of sample easier for the private vet. There will be reduced data entry requirements for AHVLA when a submission is received. It will also facilitate the submission of photographs and video.
  - Improved web page information on gross pathology, sample collection and differential diagnosis.
  - Electronic reporting of PME and test results.
- A comprehensive strategy for communicating surveillance findings to local private vets and to industry bodies.
- Active involvement with industry bodies working to improve the health and welfare of farmed animals and wildlife.
- Active exploration of where the gaps in surveillance data are located and then action to engage with the private vets covering these gaps.
- Provision of pathology support and advice for private vets carrying out first opinion pathology.
- Participate in training events/courses for private vet to enhance gross pathology, differential diagnosis, notifiable disease recognition skills.
- Improve the links between Official Veterinarian work by private vets and the surveillance system. Currently the private vets and AHVLA staff see these two areas of work as almost completely separate. AHVLA will instigate action to bring these together for both its own staff and private vets.

The effectiveness of the activities will be monitored and those that add value continued. Those that take time but add little/no value to the surveillance effort will be stopped.
Appendix 7: Further details of how the efficiency of the diagnostic service will be improved

Where possible, and appropriate, a system will be introduced to encourage sample submission by private vets direct to the testing location. The use of an online submission form will aid this by automatically directing private vets to send samples to the appropriate location. This system will improve efficiency and also help to reduce test turnaround times. All postal submissions will be subject to a triage process on arrival following a procedure approved by AHVLA veterinary staff. Submissions that meet the predetermined criteria will progress directly to testing and then reporting by technical staff. Other submissions will be scrutinised by an AHVLA vet who will decide (on the basis of pre-agreed guidelines) if the submission needs veterinary reporting or not. Wherever possible AHVLA vets will be removed from the result reporting process and all submissions not needing veterinary reporting will be reported back to the practitioner by technical staff at the testing location. The results of tests on samples from AHVLA PMs, from complex cases or on-going incident investigations will be transmitted to the appropriate location for reporting by the appropriate veterinary investigation officer.

The current process of sample submission, tracking through various testing locations and reporting needs to be analysed and upgraded. The current model involves a mix of paper and IT processes that has been adapted to handle changes during the laboratory rationalisation project but in many areas is very inefficient. An improved system will reduce AHVLA staff costs, improve access to data for AHVLA staff and customers, improve quality of service delivery and improve turnaround times. There will be a full process analysis of this system and a project through financial year 2013/14 to upgrade and streamline the system so that it supports the new business model and delivers the required efficiency gains.

All carcase submissions will be triaged before submission for a subsidised post-mortem examination. This will include those to be done by non AHVLA expert pathology providers. Subsidised post-mortem examinations will be approved where they are the most appropriate method, taking into account the cost, of investigating the incident. In other cases the private vet will be asked to collect and submit samples as an initial step in the investigation.

The project team believes that it will be possible to reduce the amount of samples tested following a AHVLA post-mortem examination by taking a more risk based approach. Fewer AHVLA vets involved in pathology will mean that a lower number are training at any one time which will also reduce the number of tests carried out. These factors combined with a lower number of post-mortem examinations carried out due to more rigorous triage and increasing provision of first opinion PMEs by other providers will enable AHVLA to reduce the number of tests undertaken following post-mortem examinations by 30% and save approximately £360,000 of cost to the surveillance system.
Appendix 8: How the new model responds to the recommendations of the Defra Surveillance Strategy Review, the recommendations of the Surveillance Advisory Group Report and the summary of the feedback from the Surveillance 2014 public consultation

1. The model responds to recommendations in the 2010 Defra Veterinary Surveillance Strategy Review to:
   - *Improve coverage of animal populations and ensure an effective geographic footprint of surveillance activities through affordable mechanisms for stakeholder engagement and surveillance intelligence gathering, which is supported by a quality-assured laboratory diagnostic service.*
   - *Explore/develop new approaches to capturing surveillance data that are more cost-effective, as exemplified by initiatives with the horse and wildlife sectors.*
   - *Enable delivery bodies to take on more responsibility for implementing the Veterinary Surveillance Strategy to meet Government and industry requirements.*
   - *Review governance arrangements.*

2. The new model respond to the recommendations in the 2012 Independent Surveillance Advisory Group (SAG) report to:
   - *Establish a tiered surveillance network that improves the access to post-mortem facilities.* This will be implemented by continuing to maintain a wide geographical coverage by AHVLA post mortem locations, by working in partnership with other providers of expert gross pathology to perform subsidised post-mortem examinations and the facilitation of an expansion in the number of private practitioner diagnostic post-mortem examination.
   - *Establish species-based centres of expertise providing in depth pathology and disease investigation and a focus for surveillance information management.* The recommendations on species based centres of expertise will be met by further development of the Species Expert Groups and the Surveillance Intelligence Unit to act as a focus for surveillance information management analysis and dissemination. The AHVLA post-mortem sites in the new model have been largely selected on the basis of proximity to high densities of farmed animal species. While all sites will deal with all species the sites will develop species based expertise in pathology and disease investigation in the species that predominate in their area.
   - *Development of expertise within AHVLA veterinary staff in gross pathology, disease investigation and subject-specific experts.* Expertise in histopathology and epidemiology will also be maintained and developed. Many vets within the Agency will have more than one of these areas of expertise.
   - *To increase the diagnostic service submission rates.* This recommendation had two aims – to ensure maintenance of expertise in AHVLA veterinary staff and to maximise the amount of surveillance information gathered. This will be met by reducing the number of AHVLA post-mortem locations but ensuring that they have sufficient case load for maintenance of expertise by concentrating in the busy locations and by engaging with private veterinary practitioner to ensure that appropriate samples from their diagnostic post-mortem examinations are submitted.
• To establish a cost effective collection service where necessary to enable access to diagnostic service or achieve minimum case load. This will be met by facilitating the expansion of non-government funded provision of post-mortem examination close to farms, rather than the large scale movement of carcases longer distances to a government run facility. A smaller scale carcase collection service is provided to ensure surveillance coverage while the private provision develops.

• To develop processes by which universities, practitioners and others can contribute and benefit from the surveillance network. The model includes other providers of high quality PME facilities and expert pathologists in the surveillance network of subsidised PME provision. It also proposes ensuring the provision of training for private veterinary surgeons in gross pathology and more systematic engagement process with the surveillance system. The species expert groups will be responsible for ensuring that the outputs of the system are fit for purposes for all stakeholders. The species expert groups and governance systems will have wider involvement than at present.

• Further development of the Species expert groups. This is part of the new model – with full time heads of the species expert groups and a widened role and membership.

• Availability of post-mortem training for practitioners. AHVLA will ensure that this is available – probably working with partners to ensure its delivery. The possibility of a formal recognition of competence in first opinion gross pathology will also be investigated.

• Collection of a wider set of data and integration of this data with the existing sources to enable alerts of new and re-emerging threats. This is part of the new model with the creation up a Surveillance Intelligence Unit to undertake this work and identification of the first data sets to be investigated.

• Establishment of effective internal governance including stakeholders. An England and Wales Surveillance Board with both government and wider stakeholder representation, especially private veterinary surgeons and the livestock industry, will be set up.

3. How the new model responds to the main findings of the 2013 public consultation on the future of scanning surveillance:

• To recognise the linkage between scanning surveillance and surveillance for endemic disease and diseases in wildlife. The new model will ensure that the scanning surveillance system is aware of the trends in endemic disease as a necessary part of being able to detect new and re-emerging threats. AHVLA will work in partnership with the livestock industry where the government funded data collected for new and re-emerging threat detection can be combined with other data to provide industry with useful analysis of the endemic disease situation. This industry led work will be funded by industry. The successful current wildlife surveillance network will be continued and the data from wildlife surveillance integrated with other data to ensure intelligence from one sector informs surveillance in other sectors.

• To recognise the importance of geography, local knowledge and accessibility. The new network of PME locations (both AHVLA and other providers) aims to improve accessibility to diagnostic pathology and retain the widest geographical coverage possible while meeting reductions in government funding.

• Concern over replacement of PME and diagnostic provision with other data sources as a way of gathering surveillance data. There is wide agreement that scanning surveillance can be improved by analysis of this complementary data. However much work is needed
to evaluate which data has the highest value and on the practicalities of collecting and analysing this data. The establishment of a unit to this work and ring fencing of funds for non-AHLVA spend on the provision of this data will help develop this area. However while this is being developed the PME and diagnostic provision are being maintained to the maximum level within the available budget.

- **The majority of respondents saw the regulatory and advisory roles of AHVLA vet staff as separate and thought they should remain separate.** This aspect will be examined during the implementation of the AHVLA Veterinary and Technical strategy. The need for experts in surveillance (pathologists, investigators, epidemiologists etc) is recognised and it is not possible to combine all these roles and the regulatory roles within one individual. However there is a need to maximise the use of veterinary resource across the AHVLA. The more geographical dispersion of field vets and their regular contact with farmers (e.g. in investigating suspect notifiable disease) means that they have a valuable role to play in the future surveillance model. The model aims to fully utilise the veterinary strengths within the agency of deep expertise, relationships with farmers and veterinary practitioners and geographical location.

- **There was support for species expert groups but they should be more visible and have wider membership.** Both of these aspects are part of the new model.

- **Concern that proposed changes would damage the current provision of the diagnostic service.** The current provision of the AHVLA run PME service at 15 locations is no longer affordable. The new model provides an affordable system and preserves the diagnostic system for postal samples and a smaller network of AHVLA PME facilities supplemented by including other providers of expert PMEs. Also by working in partnership with private vets and the fallen stock industry to encourage the development of first opinion PMEs with AHVLA expert back up the new model has the ability to improve diagnostic provision for the farmer.

- **Support for greater private vet involvement in scanning surveillance but highlighted need for training and good communications.** This is part of the new model. Training for PMEs, a strategy for engagement, partnership working are all part of the new model.

- **Equal support and opposition for development of centres of species based expertise.** The new model involves developing appropriate species expertise in pathology and disease investigation in areas of high density of that species. These centres of expertise (more than one per species) will be combined with the Species Expert Groups to form a single virtual Centre of Expertise for each species bringing together all the skills within the Agency and partners.

- **Most felt that none of the scenarios for location of PME facilities were adequate. 38% preferred scenario 1, 9% scenario 2 and 7% scenario 3. 27% suggested other options (n=95).** Limitations on the number of staff mean that AHVLA has to move to a smaller network of PME provision. This also brings advantages in maintenance of expertise while seeing a sufficient case load. The new network is similar to scenario 1 from the consultation document.

- **Most felt that the cost of a carcase collection service should be shared by farmers and government.** In the new model farmers are responsible for the costs of getting the carcase to a collection point and AHVLA will pay the costs of getting it from the collection point to the PME facility. However in maintaining as large a network as possible, and encouraging the development of a non-government PME service the model does not have such extensive carcase collection to an AHVLA PME site as proposed in the consultation. This
change is in response to other feedback from the consultation for as many AHVLA sites as possible and for an expansion of the private provision of PMEs.

- **Support for a Head of Surveillance Delivery role & an oversight board with wider membership – but concern that this must not divert resources from front line work.** The new model has a Head of Surveillance Delivery and an oversight board with wider membership. The costs of these will be minimised, and their role will be to enhance delivery of front line surveillance services.